NCBI

Nucleotide

PubMed   Nucleotide   Protein   Genome   Structure   PMC   Taxonomy   OMIM   Book

Search Nucleotide ▼ for [   ] Go Clear

Limits   Preview/Index   History   Clipboard   Details

Display default ▼ Show: 20 ▼ Send to File ▼ Get Subsequence

☐ **1: AC009938. Homo sapiens clon...[gi:9113959]**   Links

```
LOCUS       AC009938               156337 bp    DNA     linear   HTG 13-JUL-2000
DEFINITION  Homo sapiens clone RP11-115B14, LOW-PASS SEQUENCE SAMPLING.
ACCESSION   AC009938
VERSION     AC009938.3  GI:9113959
KEYWORDS    HTG; HTGS_PHASE0.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 156337)
  AUTHORS   Birren,B., Linton,L., Nusbaum,C. and Lander,E.
  TITLE     Homo sapiens, clone RP11-115B14
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 156337)
  AUTHORS   Birren,B., Linton,L., Nusbaum,C., Lander,E., Allen,N., Anderson,M.,
            Baker,J., Baldwin,J., Barna,N., Beckerly,R., Benn,J., Brown,A.,
            Castle,A., Cerny,J., Colangelo,M., Collins,S., Collymore,A.,
            Cooke,P., DeArellano,K., Depayre,E., Devon,K., Dewar,K.,
            Donelan,L., Doyle,M., Ferreira,P., FitzHugh,W., Forrest,C.,
            Funke,R., Gage,D., Galagan,J., Gardyna,S., Gilbert,D., Grant,G.,
            Hagos,B., Heaford,A., Horton,L., Howland,J.C., Jones,C., Kann,L.,
            Karatas,A., Lehoczky,J., Lieu,C., Locke,K., Macdonald,P.,
            Marquis,N., McEwan,P., McGurk,A., McKernan,K., McLaughlin,J.,
            Meldrim,J., Molla,M., Morris,W., Morrow,J., Mychaleckyj,J.,
            Naylor,J., Niloff,M., O'Connor,T., O'Donnell,P., Pavlin,B.,
            Peterson,K., Pollara,V., Riley,R., Roberts,D., Roy,A., Severy,P.,
            Stange-Thomann,N., Stojanovic,N., Stone,C., Subramanian,A.,
            Tesfaye,S., Torruella-Miller,I., Vassiliev,H., Vo,A., Wagner,A.,
            Wheeler,J., Wu,X., Wyman,D., Ye,W.J. and Zody,M.
  TITLE     Direct Submission
  JOURNAL   Submitted (08-SEP-1999) Whitehead Institute/MIT Center for Genome
            Research, 320 Charles Street, Cambridge, MA 02141, USA
COMMENT     On Jul 13, 2000 this sequence version replaced gi:6978143.
            All repeats were identified using RepeatMasker:
            Smit, A.F.A. & Green, P. (1996-1997)
            http://ftp.genome.washington.edu/RM/RepeatMasker.html
            -------------- Genome Center
               Center: Whitehead Institute/ MIT Center for Genome Research
               Center code: WIBR
               Web site: http://www-seq.wi.mit.edu
               Contact: sequence_submissions@genome.wi.mit.edu
            -------------- Project Information
               Center project name: L1978
               Center clone name: 115_B_14
            --------------.
            * NOTE: This record contains 149 individual
            * sequencing reads that have not been assembled into
```

```
* contigs. Runs of N are used to separate the reads
* and the order in which they appear is completely
* arbitrary. Low-pass sequence sampling is useful for
* identifying clones that may be gene-rich and allows
* overlap relationships among clones to be deduced.
* However, it should not be assumed that this clone
* will be sequenced to completion. In the event that
* the record is updated, the accession number will
* be preserved.
*         1       995: contig of 995 bp in length
*       996      1095: gap of 100 bp
*      1096      2065: contig of 970 bp in length
*      2066      2165: gap of 100 bp
*      2166      3117: contig of 952 bp in length
*      3118      3217: gap of 100 bp
*      3218      4168: contig of 951 bp in length
*      4169      4268: gap of 100 bp
*      4269      5236: contig of 968 bp in length
*      5237      5336: gap of 100 bp
*      5337      6309: contig of 973 bp in length
*      6310      6409: gap of 100 bp
*      6410      7365: contig of 956 bp in length
*      7366      7465: gap of 100 bp
*      7466      8417: contig of 952 bp in length
*      8418      8517: gap of 100 bp
*      8518      9471: contig of 954 bp in length
*      9472      9571: gap of 100 bp
*      9572     10511: contig of 940 bp in length
*     10512     10611: gap of 100 bp
*     10612     11556: contig of 945 bp in length
*     11557     11656: gap of 100 bp
*     11657     12627: contig of 971 bp in length
*     12628     12727: gap of 100 bp
*     12728     13655: contig of 928 bp in length
*     13656     13755: gap of 100 bp
*     13756     14734: contig of 979 bp in length
*     14735     14834: gap of 100 bp
*     14835     15782: contig of 948 bp in length
*     15783     15882: gap of 100 bp
*     15883     16812: contig of 930 bp in length
*     16813     16912: gap of 100 bp
*     16913     17855: contig of 943 bp in length
*     17856     17955: gap of 100 bp
*     17956     18939: contig of 984 bp in length
*     18940     19039: gap of 100 bp
*     19040     19995: contig of 956 bp in length
*     19996     20095: gap of 100 bp
*     20096     21022: contig of 927 bp in length
*     21023     21122: gap of 100 bp
*     21123     22053: contig of 931 bp in length
*     22054     22153: gap of 100 bp
*     22154     23146: contig of 993 bp in length
*     23147     23246: gap of 100 bp
*     23247     24206: contig of 960 bp in length
*     24207     24306: gap of 100 bp
*     24307     25275: contig of 969 bp in length
*     25276     25375: gap of 100 bp
*     25376     26338: contig of 963 bp in length
*     26339     26438: gap of 100 bp
*     26439     27420: contig of 982 bp in length
```

```
*       27421       27520: gap of 100 bp
*       27521       28483: contig of 963 bp in length
*       28484       28583: gap of 100 bp
*       28584       29532: contig of 949 bp in length
*       29533       29632: gap of 100 bp
*       29633       30571: contig of 939 bp in length
*       30572       30671: gap of 100 bp
*       30672       31631: contig of 960 bp in length
*       31632       31731: gap of 100 bp
*       31732       32674: contig of 943 bp in length
*       32675       32774: gap of 100 bp
*       32775       33735: contig of 961 bp in length
*       33736       33835: gap of 100 bp
*       33836       34756: contig of 921 bp in length
*       34757       34856: gap of 100 bp
*       34857       35784: contig of 928 bp in length
*       35785       35884: gap of 100 bp
*       35885       36818: contig of 934 bp in length
*       36819       36918: gap of 100 bp
*       36919       37873: contig of 955 bp in length
*       37874       37973: gap of 100 bp
*       37974       38939: contig of 966 bp in length
*       38940       39039: gap of 100 bp
*       39040       39953: contig of 914 bp in length
*       39954       40053: gap of 100 bp
*       40054       40999: contig of 946 bp in length
*       41000       41099: gap of 100 bp
*       41100       42004: contig of 905 bp in length
*       42005       42104: gap of 100 bp
*       42105       43018: contig of 914 bp in length
*       43019       43118: gap of 100 bp
*       43119       44057: contig of 939 bp in length
*       44058       44157: gap of 100 bp
*       44158       45127: contig of 970 bp in length
*       45128       45227: gap of 100 bp
*       45228       46166: contig of 939 bp in length
*       46167       46266: gap of 100 bp
*       46267       47241: contig of 975 bp in length
*       47242       47341: gap of 100 bp
*       47342       48308: contig of 967 bp in length
*       48309       48408: gap of 100 bp
*       48409       49391: contig of 983 bp in length
*       49392       49491: gap of 100 bp
*       49492       50414: contig of 923 bp in length
*       50415       50514: gap of 100 bp
*       50515       51482: contig of 968 bp in length
*       51483       51582: gap of 100 bp
*       51583       52526: contig of 944 bp in length
*       52527       52626: gap of 100 bp
*       52627       53610: contig of 984 bp in length
*       53611       53710: gap of 100 bp
*       53711       54676: contig of 966 bp in length
*       54677       54776: gap of 100 bp
*       54777       55729: contig of 953 bp in length
*       55730       55829: gap of 100 bp
*       55830       56781: contig of 952 bp in length
*       56782       56881: gap of 100 bp
*       56882       57863: contig of 982 bp in length
*       57864       57963: gap of 100 bp
*       57964       58892: contig of 929 bp in length
```

```
*      58893      58992: gap of 100 bp
*      58993      59960: contig of 968 bp in length
*      59961      60060: gap of 100 bp
*      60061      61030: contig of 970 bp in length
*      61031      61130: gap of 100 bp
*      61131      62075: contig of 945 bp in length
*      62076      62175: gap of 100 bp
*      62176      63111: contig of 936 bp in length
*      63112      63211: gap of 100 bp
*      63212      64148: contig of 937 bp in length
*      64149      64248: gap of 100 bp
*      64249      65186: contig of 938 bp in length
*      65187      65286: gap of 100 bp
*      65287      66257: contig of 971 bp in length
*      66258      66357: gap of 100 bp
*      66358      67306: contig of 949 bp in length
*      67307      67406: gap of 100 bp
*      67407      68325: contig of 919 bp in length
*      68326      68425: gap of 100 bp
*      68426      69370: contig of 945 bp in length
*      69371      69470: gap of 100 bp
*      69471      70457: contig of 987 bp in length
*      70458      70557: gap of 100 bp
*      70558      71497: contig of 940 bp in length
*      71498      71597: gap of 100 bp
*      71598      72513: contig of 916 bp in length
*      72514      72613: gap of 100 bp
*      72614      73585: contig of 972 bp in length
*      73586      73685: gap of 100 bp
*      73686      74654: contig of 969 bp in length
*      74655      74754: gap of 100 bp
*      74755      75734: contig of 980 bp in length
*      75735      75834: gap of 100 bp
*      75835      76762: contig of 928 bp in length
*      76763      76862: gap of 100 bp
*      76863      77765: contig of 903 bp in length
*      77766      77865: gap of 100 bp
*      77866      78849: contig of 984 bp in length
*      78850      78949: gap of 100 bp
*      78950      79898: contig of 949 bp in length
*      79899      79998: gap of 100 bp
*      79999      80952: contig of 954 bp in length
*      80953      81052: gap of 100 bp
*      81053      81998: contig of 946 bp in length
*      81999      82098: gap of 100 bp
*      82099      83067: contig of 969 bp in length
*      83068      83167: gap of 100 bp
*      83168      84155: contig of 988 bp in length
*      84156      84255: gap of 100 bp
*      84256      85224: contig of 969 bp in length
*      85225      85324: gap of 100 bp
*      85325      86287: contig of 963 bp in length
*      86288      86387: gap of 100 bp
*      86388      87331: contig of 944 bp in length
*      87332      87431: gap of 100 bp
*      87432      88388: contig of 957 bp in length
*      88389      88488: gap of 100 bp
*      88489      89434: contig of 946 bp in length
*      89435      89534: gap of 100 bp
*      89535      90523: contig of 989 bp in length
```

```
*      90524     90623: gap of 100 bp
*      90624     91562: contig of 939 bp in length
*      91563     91662: gap of 100 bp
*      91663     92611: contig of 949 bp in length
*      92612     92711: gap of 100 bp
*      92712     93659: contig of 948 bp in length
*      93660     93759: gap of 100 bp
*      93760     94583: contig of 824 bp in length
*      94584     94683: gap of 100 bp
*      94684     95656: contig of 973 bp in length
*      95657     95756: gap of 100 bp
*      95757     96678: contig of 922 bp in length
*      96679     96778: gap of 100 bp
*      96779     97717: contig of 939 bp in length
*      97718     97817: gap of 100 bp
*      97818     98720: contig of 903 bp in length
*      98721     98820: gap of 100 bp
*      98821     99748: contig of 928 bp in length
*      99749     99848: gap of 100 bp
*      99849    100796: contig of 948 bp in length
*     100797    100896: gap of 100 bp
*     100897    101819: contig of 923 bp in length
*     101820    101919: gap of 100 bp
*     101920    102860: contig of 941 bp in length
*     102861    102960: gap of 100 bp
*     102961    103953: contig of 993 bp in length
*     103954    104053: gap of 100 bp
*     104054    104987: contig of 934 bp in length
*     104988    105087: gap of 100 bp
*     105088    106015: contig of 928 bp in length
*     106016    106115: gap of 100 bp
*     106116    107050: contig of 935 bp in length
*     107051    107150: gap of 100 bp
*     107151    108098: contig of 948 bp in length
*     108099    108198: gap of 100 bp
*     108199    109050: contig of 852 bp in length
*     109051    109150: gap of 100 bp
*     109151    110073: contig of 923 bp in length
*     110074    110173: gap of 100 bp
*     110174    111137: contig of 964 bp in length
*     111138    111237: gap of 100 bp
*     111238    112180: contig of 943 bp in length
*     112181    112280: gap of 100 bp
*     112281    113249: contig of 969 bp in length
*     113250    113349: gap of 100 bp
*     113350    114356: contig of 1007 bp in length
*     114357    114456: gap of 100 bp
*     114457    115417: contig of 961 bp in length
*     115418    115517: gap of 100 bp
*     115518    116496: contig of 979 bp in length
*     116497    116596: gap of 100 bp
*     116597    117559: contig of 963 bp in length
*     117560    117659: gap of 100 bp
*     117660    118592: contig of 933 bp in length
*     118593    118692: gap of 100 bp
*     118693    119612: contig of 920 bp in length
*     119613    119712: gap of 100 bp
*     119713    120653: contig of 941 bp in length
*     120654    120753: gap of 100 bp
*     120754    121682: contig of 929 bp in length
```

```
*    121683    121782: gap of 100 bp
*    121783    122707: contig of 925 bp in length
*    122708    122807: gap of 100 bp
*    122808    123734: contig of 927 bp in length
*    123735    123834: gap of 100 bp
*    123835    124764: contig of 930 bp in length
*    124765    124864: gap of 100 bp
*    124865    125802: contig of 938 bp in length
*    125803    125902: gap of 100 bp
*    125903    126831: contig of 929 bp in length
*    126832    126931: gap of 100 bp
*    126932    127937: contig of 1006 bp in length
*    127938    128037: gap of 100 bp
*    128038    129026: contig of 989 bp in length
*    129027    129126: gap of 100 bp
*    129127    130071: contig of 945 bp in length
*    130072    130171: gap of 100 bp
*    130172    131122: contig of 951 bp in length
*    131123    131222: gap of 100 bp
*    131223    132173: contig of 951 bp in length
*    132174    132273: gap of 100 bp
*    132274    133218: contig of 945 bp in length
*    133219    133318: gap of 100 bp
*    133319    134324: contig of 1006 bp in length
*    134325    134424: gap of 100 bp
*    134425    135349: contig of 925 bp in length
*    135350    135449: gap of 100 bp
*    135450    136384: contig of 935 bp in length
*    136385    136484: gap of 100 bp
*    136485    137422: contig of 938 bp in length
*    137423    137522: gap of 100 bp
*    137523    138453: contig of 931 bp in length
*    138454    138553: gap of 100 bp
*    138554    139487: contig of 934 bp in length
*    139488    139587: gap of 100 bp
*    139588    140590: contig of 1003 bp in length
*    140591    140690: gap of 100 bp
*    140691    141605: contig of 915 bp in length
*    141606    141705: gap of 100 bp
*    141706    142652: contig of 947 bp in length
*    142653    142752: gap of 100 bp
*    142753    143681: contig of 929 bp in length
*    143682    143781: gap of 100 bp
*    143782    144714: contig of 933 bp in length
*    144715    144814: gap of 100 bp
*    144815    145771: contig of 957 bp in length
*    145772    145871: gap of 100 bp
*    145872    146798: contig of 927 bp in length
*    146799    146898: gap of 100 bp
*    146899    147838: contig of 940 bp in length
*    147839    147938: gap of 100 bp
*    147939    148937: contig of 999 bp in length
*    148938    149037: gap of 100 bp
*    149038    149985: contig of 948 bp in length
*    149986    150085: gap of 100 bp
*    150086    151098: contig of 1013 bp in length
*    151099    151198: gap of 100 bp
*    151199    152147: contig of 949 bp in length
*    152148    152247: gap of 100 bp
*    152248    153190: contig of 943 bp in length
```

```
        *     153191    153290: gap of 100 bp
        *     153291    154260: contig of 970 bp in length
        *     154261    154360: gap of 100 bp
        *     154361    155304: contig of 944 bp in length
        *     155305    155404: gap of 100 bp
        *     155405    156337: contig of 933 bp in length.
FEATURES             Location/Qualifiers
     source          1..156337
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /clone="RP11-115B14"
                     /clone_lib="RPCI-11 Human Male BAC"
BASE COUNT     39109 a   29834 c   33442 g   38778 t   15174 others
ORIGIN
        1 gtttaacttg catgcctgcg gttcggctct agaggatccc cgacctcagt gatccacctg
       61 cctcagcctc ccaaagtgct gggattacag gggtgagcca ccgcacctgg ccgctcggtt
      121 ttaatttcta atgccataaa tattgacggg tttgactctc ataaactaaa gttatctggg
      181 ggcccttaat aattttgag agtgtaaaag ggtcccgaga acgaaagttt gagactcatc
      241 aaattaggca aaagagggat tcagaggatt tgccaaaaag ggaagaggaa agagagaaaa
      301 ggaaagaaga gattcaagtt cagtgaatat taggctgatg gatttggatt cactactatc
      361 attttgttcc aagagcactt tattctgtgt tagataatgg caaacgttaa ttatagaatc
      421 atttaatgtc tttaatacta tgtaacatta attatattat aaaagtataa taatattgtt
      481 attggtttgc accttggcaa tttaaaacat ttcatccaaa tttataaata gttgagaaga
      541 atagaaaaat aactggctcc tgttgtactc acctgctctc ttgggagagg agtttgacac
      601 acgccgtgtg accgcagtac agggcatang ccaagggcgt gctctcattg atgtcccgca
      661 gggtgctgtc cattcccaac tccagcagtg actggacaca ttcgggcttc cctgcagctg
      721 cagcccagtg caaaagtgtc ctggaggggc catgtgaaaa aacacaancg tctgaacatg
      781 tgaattgttc aggctgcttt accaacaaca gctcctgctc aaagtcaagt tgaggtaggg
      841 gaaatcttgt tgcctttca gtntaaaatt gtcagtggtt aatgagcccc aagaatatgg
      901 tggaacatgg gaagggccct tcctctactc taagaattcc ttgcatttaa ctctcgtggc
      961 tttnatacat gtctaagaag agagtaggtg gtgaannnnn nnnnnnnnnn nnnnnnnnnn
     1021 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
     1081 nnnnnnnnnn nnnnngccta gagcttgcta acccgcccgt tcgagctcta gnagaaacac
     1141 ccttctttgc ataaatataa tttatgtatt tctctattaa tgttcattta tgccatttct
     1201 tgttagttta gttcttcatt atcatctttg attatatctc tttgttcatc aatgtgaaat
     1261 tttcgttatg aaataaactt ggaagtggaa ttacagggtt ataaggtata agcacctatg
     1321 attttattaa atgttgccac atttatcccc aaaaatggtt gtcccaactt atactttaac
     1381 caacagtatg taagagtttc ccaaatcctt gacaacacct ggcatttcag atgttttata
     1441 attgctaatc cgatatgtat gaagtggttt tcaagtttca caacagcttt gttgagtttt
     1501 tattagactt gcaatgaatg tatagattca ttttcaggaa attgatagct ctattatatt
     1561 gagtctttc cttcataaac atagtatctt cccatgttta gttcttcttt tatgtcaccc
     1621 agtaagtttt atacttctta tccacataag tcttgctctt cttttggttag atttattcct
     1681 aagtaccgta tttttgttgt tggtgctttt gtttttcgct ccttcttcct tttgcttctn
     1741 gtctccgcgc gaccttccct tcnctcctcg cctttttctcc tcgtgcccct ccccctctcg
     1801 cccccccgcc gcgtcttgct ttctttcttt cgcccttcgt cctcctcctc tcccccccg
     1861 ttccccctc cctctcctct ctttttccc ccctcccgg cccgccgtc ccgcgcctcc
     1921 ctccntctcc ggctcccgct ttctctcttt cctctctccc gccccccgc cgctcctccc
     1981 tcctcctccc cgttctcccc ctccctctt cccctcccct tcccgcccgc ccgctccgtc
     2041 tcgcataaca aaaaaagaa aaaannnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
     2101 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
     2161 nnnnngcctg atactatgca aaccctgcng gtgcggctct agnagaatcc ccgncagtat
     2221 tagagcagga gtgaaagttt attgaaaagc tttagagcag gaaagaaagg aagaaaagtc
     2281 acttggaaga ggatcaagcg ggcgacttga gagatcaagt gcatggtttg accttttgat
     2341 ttggggtttt atatgttgcc atgcttccag ggtcttccgt tgcttttccc atgactcttc
     2401 tttggggtgg gccatcttca tgtgcagcag cctgctagtg attgggaggg gagcatgcac
     2461 agtgtttact ggaattacat gcatgctcac ttgaggcttt cttccttgcc agtagaatgt
     2521 tcccggaagg tcatatacca gttaaactcc gccattttac ctctcagtcc acatgcttga
     2581 gcccactcac ccaactcctg agatcttatt gaaagctgct aatcaccagt ttcaggggtt
     2641 ttttggtgtt tgtttgtttg tttgtttgtt ttgtttgaga cggagtttca ctcttgtcac
```

```
2701 ccanngctgg agtgcaatng gcttgttctc agctcactgc aacctccgcc tcccangttc
2761 aagtgattct cctgcctcag cctcccaagt agctgagatt acaagcacgt gccaccacac
2821 ccagctaatt nttgtatttt tagtagagac ggggtttacc tgtgncccccg ggcttgnnnt
2881 tnncttctgc ccttngttnt ccncctgcct cgcttcccnn ntcttgcgtt cctgcctttc
2941 cccccctctg gcccggtttt gtttctncnn ncttcttcct tccttncccg cgtcctccct
3001 tcctcttctt ttttctgctt gcgcctgtcc ccccncttcg gcgccgggct tcgcgtgtcg
3061 gggggctctc cgcctcgtgg ccgcctctgc cgggcctgaa caaaaaaaaa agaagaannn
3121 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
3181 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnngc ctgagtcttg catagcctgc
3241 aggctcgact ctanaggatc cccttgtgat gttattatga atagagttta atgccataaa
3301 ccccttaaag agtgggggat ccctctacag ggttcagtgg accccatttt gagacccaga
3361 ggcctaaagc acaagctgta acaggaggag gagatggctt acacaagatg ctgcaatagc
3421 atcaattcac acagacatat tctttatagg gaaacttgag cgtcggaagt gccctggggc
3481 tctctctctg gtggtattag gagtctagaa ttccgcggat ccttctatag tgtcacctaa
3541 atgtcgacgg ccaggcggcc gccaggccta cccactagtc aattcgggag gatcgaaacg
3601 gcagatcgca aaaaacagta catacagaag gagacatgaa catgaacatg aaaaaaattg
3661 taaaacaagc cacagttctg acttttacga ctgcacttct ggcaggagga gcgactcaag
3721 gcttcgcgaa agaagataac cagagggcgt acaaagaaac gtacggggtc tctcatatta
3781 cacgccatgg tatgctgcag atccctgaac agcagcaaaa cgaaaaatac caagtgcctg
3841 aatggggtca gtcagcgatt aaaagtattg ggttctgcgg aaggacttgg atgtgggggga
3901 cagctggccg gtgcaaaagg ctgccagaac aatgagctga atacaacggt tataagcgta
3961 gggttggctg tgggcggtgg gccgaaggag gctgatgatc agtaattcta ctgtggtatc
4021 aaaaggtgcg ggcgagctag tgagagggg agagagggggg gggtgttcgt naggcggggg
4081 gtgtgcgacg cgcggcggac gctaaagagg cggcaaaagg gccgccgccg gctctagtgg
4141 acgaaaacgc gtattcaacg ggttggagnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
4201 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
4261 nnnnnnnnga ctttcttgca tacctgcggt ttgctctana gaaacccagc cgtgagacca
4321 cgaacccccct ataaggaaaa aactccgaac acatgcagag cgtcagaagg aacaaactcc
4381 agacgtgcca cttttaagagc tgtaacactc accgcgaggg tccgtggctt cattcttgaa
4441 gtcagtgaga ccaagaaccc accaatttcg gacacactag gctctgacaa gcaactctgc
4501 aaagcaggta aggctttttct ccccacaaaa ggaaaactgg gcactggcca tgggacccaa
4561 ggagatatct gcactgtcta tactttttag gttttttcttt cattttgttt tgtttgaaat
4621 agtttcactc tgttgcccag gctggagtgc agtggtgcaa tcttggctcg ctgcaacctc
4681 cacctcctgg attcaagtgt ttcttgtgcc tcagtctcct gagtagcggg attacaggng
4741 gtgtgccacc acacccaact aattttttgta tttttaataa aggtgggggtt ttgccaggtt
4801 gaccaggctg gtcttaaact cctgacctca agtgatacac cccctcagcc tcccaaagtg
4861 ctgggattac agatgtgagc cactgcaccc aggctgtttt caaggtttnt taaaattttt
4921 tattgtatta ttattattat actntaagtt ttagggtaca tgtgcaccat gtgcagggta
4981 gttacatatg tatacatgtg ccatgctggt ggcgctggac cactaacttg gcatctagca
5041 ttaggatat tctccaatgg tgtgcgtgcc ccctccccca ccccaaacag tgcccaaggg
5101 tgatgttccc ccttctgtgg cctgggtgct cattggtaca ttccactcat gaggagaatt
5161 tcggggttgg gtgtttgtgt cttgcctagt tactgaaatg aggattccca atcatcatgt
5221 ccctacaagc ctgaacnnnn nnnnnnnncn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
5281 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnngttt
5341 aacttgcata gcctgcagtt tcggctctan aggatcccct tactttgaga aacgccatga
5401 tcaactagcc aatgccatag gtttctatga ctgagacaac tctgattgct gcttggacct
5461 ctgctgtcca ttacagcata aaccaaagag tgactgaggt agatcttaat tgactgcagg
5521 tttatttttgc caaggttgag gatgcaacca ggaaaaagaa acacaggtca cagtgggatc
5581 tgtgacctgg gcttttttcca aagagagttt taggaacttc agtatttaaa gaggagggta
5641 ccgagctcga attcgtaatc atggtcatag ctgtttcctg tgtgaaattg ttatccgctc
5701 acaattccac acaacatacg agccggaagc ataaagtgta aagcctgggg tgcctaatga
5761 gtgagctaac tcacattaat tgcgttgcgc tcactgcccg ctttccagtc gggaaacctg
5821 tcgtgccagc tgcattaatg aatcggccaa cgcgcgggga gaggcggttt gcgtattggg
5881 cgccagggtg gtttttcttt tcaccagtga cgggcaac agctgattgc ccttcaccgc
5941 ctggccctga nagagttgca gcaagcggtc cacgctggtt tgccccagca ggcgaaaatg
6001 ctgtttgatg ggtggttccg aaaatcggca aatcccttat aatgaaaaga atagcccgag
6061 ataggggtga ggggttgttc cagtttggaa ccagagtcca ctattaagaa cgtggacttc
6121 cacgtcaagg gcggaaaccg gttataaggg ggaagggccg ctacgggaac cttacacaat
6181 caagttttttc gtgtgcgggt ggcctagaag cttaatctgg accctaaagg gagccccgcg
6241 tttaaactcg acggggaag ccggnacact gtgcagaaag gaagggaaaa gcgaaagagc
```

```
6301 ggccttgggn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
6361 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnng gctangactt
6421 gcaagacccc tgcggttcgg ctctagnagg aacacctaat ctgtgcattt ctcccaggca
6481 gtatttgctt ttattttctg cttttgctgc gtttttgtcc cctcatatct catcttctat
6541 gactggtctc ttctgttcac cctgtgccag cctaaacatg aaacagtcat tttccttta
6601 attccccgaa gaaactatga aaaggaagcc attaagttta gaagacttac tgaagataac
6661 agacagctca aggctagata ctttaatact ttaaggctag atactgagaa gatttaggac
6721 tccagctttg ataaaatagc ttgcatcacc tagccctttc ttcaaaaata actataaacg
6781 ctccctctcc ccctcccct gcccctccct ctctcccctt tgcatggtct ccctctgntg
6841 ccaagcggag gctggactgt nctgccgcca tctcagctca ctgcaacctc cctgcctgat
6901 tctcctgcct cagcctgccg agtgcctggg attgcaggcg cgcaccgcca cgcctgactg
6961 gttttcctct tttttggtgg aaacgggggtt tcgccgtgtt ggccgggctg ggctccagct
7021 cctgaccgcg cgtgatctgc ctccctcgcc tcccggggtg ccaggattgc agaggcggtc
7081 tcgctcattc agggcgtatt ctttgccccg gctggggtgc aggggtgggg ctggggtcgg
7141 tcaacctcca ccttccgccc gctggccttg gcctcccggg ggccgggttg gggcgcctgc
7201 cggccggcac gctgtgtaga aggggggaccg gccttgccgg ctgccgtcgc gtgggtgggg
7261 ggggcccttc ggctggcttt ccgtttggag gtgggtcccc tttcccggcc cctccctct
7321 gtaggcggat ggtgttcctg tcggcatcac aaagaaggag agaaannnnn nnnnnnnnnn
7381 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
7441 nnnnnnnnnn nnnnnnnnnn nnnnnggttt tagacttgca taccctgcgg tgcgactcta
7501 gaggatcccc gtttcaccat gttggctagg ctggtctcga actcccgacc ttgtgatctg
7561 cccacctcag cctcccaaag tgctgggatt acaggcatga gccatcgtgc ccggccaatt
7621 aattgtattt ttaagttcaa ctatattcct actgattttc tgctttctgg atctgtccat
7681 ttctgataga gggatgttga agtgggtacc gagctcgaat tcgtaatcat ggtcatagct
7741 gtttcctgtg tgaaattgtt atccgctcac aattccacac aacatacgag ccggaagcat
7801 aaagtgtaaa gcctgggggtg cctaatgagt gagctaactc acattaattg cgttgcgctc
7861 actgcccgct ttccagtcgg gaaacctgtc gtgccagctg cattaatgaa tcggccaacg
7921 cgcggggaga ggcggtttgc gtattgggcg ccagggtggt ttttctttc accagtgaga
7981 cgggcaacag ctgattgccc ttcaccgcct ggccctgaga gagttgcagc aagcggtcca
8041 cgctggtttg ccccagcagg cgaaaatcct gtttgatggt ggttccgaaa tcggcaaaat
8101 cccttataat caaaagaata gcccgagata gggttgagtg ttgttccagt ttggaacaag
8161 agtccactat taaagaacgt ggactccaac gtcaaagggc gaaaaaccgt ctattcaggg
8221 cgaatggccc actacgtgaa caatcacccca aatcaaagtn tttgggggtc gaggtgccct
8281 aaagcactaa atcgggaccc taaaggaacc cccgtttaga gcttgacggg aaaccggcaa
8341 cctggcaaga aggaaggaaa aacanaggac ggcccttggg cctgatagtt aaggtgaacc
8401 taccgaaaac aaacccannn nnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
8461 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnggc
8521 tagacttgca tagcctgcag gttcgacgtc tanaggatcc ccctttttgca tgagccagag
8581 ttgatactct tattaaatgc ttggtgtttg gagaggagtt tgtgaggcca acatttgcct
8641 taggtactgg tcagacaaag ctgaacctga tgagagagaa gaggtcatca gattgcacat
8701 acttaaaaag taaagaaact ctaggtagtc ttgcctccca cccaggctta aagagttggc
8761 atcaaggtgc tcaagtggac ccaacacaga gactggcgat gctttcaggt ttggttctgt
8821 ttgctgctct tataaactca ttttgtgtcc aagtggcttg ctctgtcaga tgaaaccttg
8881 gaaaggtaaa aaatccttct caagtcaaat tttcatcttc ctttgaaatc tctgaacccca
8941 ttaactcggg acattaacca gcactttcat gttacccacc tgagaccacc tcttgttcag
9001 catcaaccat cttttttttt tttttttttt ttttttttg ggaaagagca tgctttattt
9061 ggaagcaaag tgctgcacag tgaccgacag atgaaggcca cccattgggc actcacacat
9121 cgtactccaa aatacacaca agatggtgtg ctaataaaaa tcaatgggaa caggggttcc
9181 tctggggcac tcccccaacc tcatcccttg aagggggggg gaaatctncc aaccatcttc
9241 cttgtggcag cggggggttca ctagaaataa gcccctcagg gatgcctccg gggtcttaaa
9301 aaaacacttt cttaagattt gtgggagctt catttggggt tcatttcatg tgtgctaagg
9361 catcaaacaa cttcggacaa attgcctggt tgggccccaa aaaattttt agccttgaaa
9421 gtggcaggtt cttattggcg ggtcttctgg tggtgaatta aaaaggcttt tnnnnnnnnn
9481 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
9541 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nggctagact tgcagcctgc ggttcggctc
9601 tagnagaatc cccccactgc actccagcct gggcaatatt gagcactgaa tgagcgagac
9661 tccggctgca atcctggcac ctcgggaggc cgaggctggc agatcacgcg cggtcaggag
9721 ctggagacca gcccggccaa cacggcgaaa ccccgtctcc accaaaaaat acgaaaacca
9781 gtcaggcgtg gcggtgcgtg cctgcaatcc caggcactcg gcaggctgag gcaggagaat
9841 caggcaggga ggttgcagtg agctgagatg gcggcagtac agtccagcct ccgcttggca
```

```
 9901 tcagagggag accatgcaaa ggggagagag ggaggggag ggggaggggg agagggancg
 9961 tttatagtta tttttgaaga aagggctagg tgatgcaagc tattttatca tagctggagt
10021 cctaaatctt ctcantatct agccttaaag tattaaagta tctagccttg agctgtctgt
10081 tatcttcagt aagtcttcta aacttaatgg cttccttttc atagtttctt cggggaatta
10141 aaaggaaaat gactgtttca tgtttaggct ggcacagggt gaacagaaga naccagtctt
10201 anaanatgag atatgagggg acaaagatgc agcagaagcc gaaaataaaa gcaagtactg
10261 gcctgggaga aatgcacana ttactgagag ctggtgcctt ggcagtgcac atggaatgag
10321 aactatgtag tgagaatttt ntttcctact cataatgttc ttcctctaag gggacccatt
10381 tatcacaact ctggtctgtc actggttctt actcactggg ctctcgggtg ggggatgact
10441 attgtttggc attatggaga atttgggggtt ggtacttaat ctgtctctac tgccaaaaaa
10501 acaatactta cnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
10561 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn ntgctaatct
10621 tgcatgcctg caggtcgact ctagagatcc cctctgtggg gccttggaga acctttatgt
10681 ctagctcagg gattgtaaat acacgaatcg gcactctgta tctagctcaa ggtttgtaaa
10741 tacaccaatc agcaccctgt gtctagctca gggtttgtga atgcaccaat cgacactctg
10801 tatgtagcta ctctggtggg gccttggaga acctttgtgt tgacactcta tctagctaat
10861 ctggtgggga cggtggagaa cctttgtgtc tagctcaggg attgtaaacg caccaatcag
10921 cgccctgtca aaacagacca cttggctcta ccaatcagca ggatgtgggt ggggccagat
10981 aagagaataa aagcaggcca cccaagccag cagtggcaac ccggtcgggt caccttcgac
11041 accgtggaag ctttgttctt tcgtcgtttg caataaatct tgctactgct cactctttga
11101 gtcacactgc ttttatgagc tgtaacactc acctacgaag tgtgcaggtg tactcctgag
11161 ccagtgagac cacgaacccc ctagaaggga aaaactccga gcacctccga acgtcagaag
11221 gaacaaactc cggacgggcc accttaagaa ctgtaccact gcccgcgagg gtcccggggt
11281 ttattctgga agtcagtggg accaaagacc tcccaatttc ggccaccta gggcgctgac
11341 aaacaactgt ggaaagcaag taagggcttt tttcccacaa aaggaaagcg ggcactgtgc
11401 ctgggacccc agggaaatat tggcccgcgc catactctga aaggggctct gtgatttggc
11461 ttggtgtgaa aagtttccat gctcttccca caccggaagg aaaggagcag gtcgggccgc
11521 tggagccacc gtcgtggtac aagagtgtag ggagagnnnn nnnnnnnnnn nnnnnnnnnn
11581 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
11641 nnnnnnnnnn nnnnnngccc ttgatctaat gcatacccct gcaggcttcg acgtctagaa
11701 gcatccccat tcactgatgg taacagacct ggtgccatgt gactcagata cattccactg
11761 ctaacaatcc agcaaacatt tcatgtttgt ttgatacctg ctaataatat agtagcatcc
11821 agaggcaaga gaaaggtgtg ggggggacca catgtcccct tattcccaac ctgactacta
11881 gagagtatgg catgttaaaa tgaaagtaag gcttggattg aattttggca gacacataaa
11941 ttaatattta ttcataaaca tgaaacaaa tgcaaaacta ttttgaaggc agaatggacc
12001 agcctaggaa aatgatcaga tcttcatgca gttaaaaatg caggaccatc gagaagtgag
12061 acctgaagat ggtaataaac tgctgggcgt gccagattct gcaggccagg gtggtagagc
12121 tgtgctcctt ctgcctatcc cttatgccaa gtaagaaacc ctctgggtta gattttgaca
12181 aactatttga agtgctaaat aaccacctt gaaggttatt gattcctgat tgggattcct
12241 aatagctaat taactgccct gaggggtagg ggtagattcc tgattaggat actttgaatg
12301 tttgctaact gctgataaac gtttgctaac tactgctaaa tgtttgctaa ctgctgctaa
12361 nagntaattt atatacacac tacagcatac tgttcatagc caaatacagc atcactgttt
12421 tccccaatct ccagctagac atctaagtca tgcttgtact gccaatgcct tgccgtcacg
12481 ttctgactgt ctaacagctc atctctcaaa ttggcttctc tttatctccg accactggct
12541 gagttcagcc ttatagaact ttctggatac ggactgcccc aacgctatct acctccggct
12601 tctaaggatg ctaccaaatc tacctaannn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
12661 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
12721 nnnnnnncct aacttgcata cctgcggttc gactctagna gatccccaag ttccttatgg
12781 tcctctatca cttgtaagag agtgaaggag tcttgagacc caaacacttg agaatctctg
12841 ttctagacca acatatgatg atgtttcttc ttctcccact tagacgctac ctcttgagtg
12901 gcaggtttta catgcttgaa gcatctttct gcctccctct gatgagggat agatttacgg
12961 tttcatccac agactatggg cctgggcct gtattgtctt caaactctgc cactttaaac
13021 tttggtagaa cttgggttcc cccaaaggag acgttaagac aggctctagc cttgggaaat
13081 tagttcgcct cccagccatc cctcctctct tcccatagaa ccctagagcc agttttcaat
13141 gccagtctct cagagaccct cacctcattt tctctgccga cacttttgca gataagtcta
13201 gcactgacta gaacacaggt tgtagagggt acagcataac gttttgtgt agaaagatac
13261 ccataacaga atattcgggc cttccgcatg aacacccaag aactcaccct ggaatggcac
13321 aggcaggaac attccggagc ccttacatcc acttcccaaa agatctctgt aatctgcaaa
13381 ataggcacaa accctccagt tagggcaggc catctgcttt tatgccttgc caccccaaac
13441 tcgctctaac ccaccaatcc aattctacct nctggcagca ctgtgtgacc tgagttcatc
```

```
13501 atgctgccnc agtggtcagt agggcatcct ctgcggttcg tgaggacana gtggcgaatg
13561 gtccagtctc tgcagcgtgc cgtgtatctc aacacaaaat agtgtggctt gtggaaaacg
13621 gcccttggtt accataggtg cctactgacc acagannnnn nnnnnnnnnn nnnnnnnnnn
13681 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
13741 nnnnnnnnnn nnnngcctt gactatgcat gcctgcaggt tcgactctag aggatcccct
13801 gagtttatat ttgcaggatg atataaatga tccaaccccc ccaacacata tagtttttgt
13861 ctaatggaaa ttttgctgtg attatttata attggcagtc tttcttccag aagaagctaa
13921 aataagactg gcacttatcc tgaagttcct taataaaacc gcactttaaa attatcatgg
13981 gccttgacta tattatatat ttgattctaa ttagtaatcc tttactgaat ctctgttgtc
14041 tcttttctaa atatgtttag ccacccttga ataccattct ccactattaa tattaattta
14101 ctcaaagtat tcacagcatt ctgtaaacat gtatttgata atatttgttc ccaaatttac
14161 ccattgttaa ttatgggtga ctaataataa atttaatgct atttgaggat gcttttcttg
14221 tatcagtgcc actctcanga attactaagt gacattttaa attgattatt ttaaactctt
14281 tctaactaca tagttatgat ttctttcatt ctcatcctgt tgagagatga gaacgtgttt
14341 gtgcctttca taacttgttt aaagcagagt tttagaattc atttttagga tctaaggtgg
14401 ctattantta cactggcaag attattttga atgcaagatt ctgacaagaa ttaattaaaa
14461 acaataaaaa atgcagagtg cttaaatgtg atatattgaa agagtagata cttaacttat
14521 aaataggcat ctggaagttg atggctgact actattntgg gataattggc tggccatggg
14581 ataatnctac aacgcagaat acctattcaa ggctgcatca aaaacatcac aaatgttcat
14641 tcttttntag ggactctggt aagngacttc tgaaaggaag aacattttat tttattatct
14701 gancatactg atgtgggata accgaaattt aaacnnnnnn nnnnnnnnnn nnnnnnnnnn
14761 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
14821 nnnnnnnnnn nnnngcctaa cttgcatgcc tgcagctcga ctctagnaga atccccgtgc
14881 atggtggtgt atccctgcag tcccagctac ttgggagact gaggcaggag atcacttgag
14941 acacaggagt ttgaggctgc agtgagttat gactgcacca ctgtactcca gtctgggtga
15001 cagagtgaaa ccccatctct taaaaaaaga aaatgctgga tatagggtgc actatcactt
15061 ggatctttca tgtagcctga catttttttt tttaattttt ccaaatgtaa aaaagacaag
15121 tagtgacatt tatttatctt ttgatctatc tctttttttc catcttttt t tctatttgag
15181 taacatgtat cccataggag cttgtagtct ggtttctcac ttggacacaa gtgcctttca
15241 ggagttcaca gtgaagtgta acagacacat acacagttga attacaacac agctaggctt
15301 gccagattta gcaaataaga attagaatgc tcagctcaat ctgaagttta gatacataac
15361 aaataattgt ttcatatatg ttctaaatat ggcatgagac ctatgtgtaa tacaaattat
15421 tcattgttta tctgaaattc aaaattaatt gggcatcctc cattggacct gacaacctta
15481 atttacatga cataggagct actatcgcat gatataaata gagaggcctg ggggaacaca
15541 aagacctgac aaacacgacc gggcgctttt taggcgaaga aagtaaagag gcttcaaata
15601 ggaagcatgt ggcaagtatt gaaccggaac tcacctcgca tgatctgaaa aaaccgatca
15661 aatatttggg aatgggaatg ctggggaatc tggacctaag gggcatattg gggggggcctg
15721 gaatagtcag gaggggtgga acgtttcgag aggcgctggg acaccttaaa aatattgcgg
15781 ggnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
15841 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nngctagacg ttgctgaccc
15901 tgcggttcgg gctctagaag gatccccctt gcatagctct ctagtcaaag aaatgtaaaa
15961 ttttgaattt ttgaggggggg ggagaggggg acagaaaagc tttcactaca ttctatttgc
16021 tagtggcagt caactttaga aacccccttct atgcccttcc tctacccct tatcccagtt
16081 ttctcttttc ttcagctcag acactggaaa agtccatagc aagagcagtt cttaaggcgt
16141 gtgctagaag ggaggggget aggaggacag ccatatgtct gtctgagata tgggacttcg
16201 gctgatatgc acagaccagt ggctttttaaa cttgatgggc aagtttttaa aaatcgcctg
16261 ggaggctgag gcgggcagat catgaggtca agagatcgag accatcctgg ccaacatggt
16321 gaaacccgt ctctactaaa aatacaaaaa ttagctgggt gtggtggtgc atgcctgtag
16381 tcccagctac ctgggaggct atggcaggag aatcgcttga acctgggagg canagtctgc
16441 agtgagctga gatcgcacca ctgcactcca gcctggggac agagtgagac tctgtctcaa
16501 aaaagaaaa aaaaaaattg gcaggggggt tgggtaacat gcagactccc caacaccaac
16561 tacccagtgc tgctccagag ttctgactga gagggctagg gataccctg gtcctggctt
16621 gggcctatgg ggataatttt gaaaccctct cctcaaacca gccggctttg atttgaaaag
16681 cacccaggga ttggcccaag gacgggggcc cactggagaa ttgcttcaca ttgctgggga
16741 gctaggaggg cccgagagaa agaaaggggc tctagaaacc gtgggatggg gagctatgga
16801 actagaagga ggnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
16861 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnngctaagc
16921 ttgacaaacc tgcaggttcg actctagnag gatcccacca tgaggcctag agaattggat
16981 tttctttgct aagtgggtgg tattgcgaaa tgggaactat tctgttcaaa gctggttcta
17041 ggagtgtttt gaagtagatg aactttccct cagcctgcct ttctgaaatt tgttctttt
```

```
17101 ttaaaaaatg gttaattcac ttttttccta atgtagctta tgttcttcta ctttcttact
17161 tgcttaggat caacatctgc tcttaggaaa acacttactt ttttcttttt tcttttttttt
17221 ttttagacag agtcttgctt gcttagtaac ccaaggctgg agtgnantgg cgcgatcttg
17281 gctgactgcg acctgtgact cttgggttca agcgattctc ctggctcagc ctgctgggtt
17341 ctgtggttct ggcggcggcc cgcccacctg cgtactgttg ggtgtggggg gctgggtgtg
17401 ccgcgggtgg ccgggccgcg cggggcccgc ctgcgtcgta tccgccgccc gcgggggctg
17461 gcggggggtg cggcggcggc gggcggccct gcggggggcg cgcggggctc tgcgtgcccc
17521 ccccccgcg gtgcggngac ggtgtcgggc gttgccgccg gggcagggcg cggtcggggc
17581 gcaggtcaga ggcgcgtggc ggcgcgcgcg cgcggggcgt tcggcggtgg ggcgggtgcg
17641 gcctgggcgc gcgtgggcgg ggtgcaggcg ccgggcgggc ggttgtggtg cgcggagcgg
17701 aagtcgggtg cgcgcgtgtt agcccggcca cgctctggcg caacgctgcg cgggcgcgcc
17761 gtccagcggc gtgcgggcga cccggcgggc gagcggaacc ggccgtggcc gccggcatag
17821 tgcggtcatg aatagcgcac aaagaaaagg acgatnnnnn nnnnnnnnnn nnnnnnnnnn
17881 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
17941 nnnnnnnnnn nnnnnngcta agcttgacaa acctgccttt tcgactctan aggatccccc
18001 tgaaatagac acggggattc aaggtggtca gagttgccag atattaacca gtgtccacct
18061 ctggctaacc tctgttagag attgattttc tgaggctctt tgggagctta gtttatattt
18121 atgagttttt actgttcagt agtgaacctc catggagaag cccttaagtg tatttttttt
18181 ttatttagtt attgagaaat attctagccc cttgctgcac aaaagatgga ccaactacca
18241 acataatctg gtaacttgcc agatatccag aatctctgcc cctaccctgg tctactaaat
18301 cagaaagttc atcttcggtt gatcccccag atcacgtttg tgcccattga aatttaagaa
18361 gcattgcttt accctgctcg tgatcaaagt ggggctcaca tataccaaga gtgtcacatt
18421 gtaagttgct tttcttgcaa ttgggaggga ttggcgttgc tgcancaaca caatcctcct
18481 ggacgttttt ggctggtagg ggtacaggct ggtcacaaaa cagaacatct ctacagagtg
18541 gagacttttg gcccattagc aaccattgta agcaaacagg cacagacttg ctgttcatta
18601 accttgttgg taacctcaca ttttgtttct ctaactctac aagaaccttt ggggaggcaa
18661 gttcagttta aattccttgg aaaagacttt cctgctcaga acaatttaat gcaataaaat
18721 atggttctcc taaacccttc atagtttggc cggaaggagc canagggag ggagggaaat
18781 tggtgaggcc agtttcctat gttgggctac cttaattaca ccgcggcgac gcggtgtgaa
18841 tctgggcact tttcaaggag taaaatagac ggaaggaggt ggggccagct tgaagattgt
18901 caaacatatt taggtgctca gaaaatgacc tgcacaagan nnnnnnnnn nnnnnnnnnn
18961 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
19021 nnnnnnnnnn nnnnnnnnng ccttagcttg cataccctgc cttcgactct agaggatccc
19081 catttattga aaagaaattc tttctccact gagtttctgt gatgccttta tcataaatca
19141 gatttatcat aaatcctatg gatgtgggtc tgtttctgaa gtctaattta ttccatgatc
19201 tgttgtcttt tcttgttcca gtaccatact gttttaattt ctctagcttt gatatcaggt
19261 tttgtctttt ttcttcagta ttgccttagc tattcagagt tctttttatt tccatatcaa
19321 ttttacaaat agcttatcaa tttctaccaa aaaaattgat agcattttta ttgggattgc
19381 attgaattta tatatccatt tggaatgact tgatatctta agactgttgc atctttgaat
19441 tccatgttca tgatattacc tgtcatttac ttagatcttc ttttacttct ctcagcaact
19501 atctgtagtt ttcatcgtag agatcttata caacttctat cagatttatt ctacataatt
19561 gatgtttttg gtgctttaaa aattttacca attgtttgtc tcttttaaa aatagattca
19621 tttccccaat gaaattctcc aacctttctt ccattgtggc tatcattttc tccattctct
19681 tgaccatatt aatcacagtt attctaaact ccctgtcagt tattgttaac atctgattca
19741 cctataaatc tatttactct aaaaaacatt tctacttggg atctccataa tgttggttcc
19801 aaagcctggg acggttcaaa gccctggaac attcgcacaa ggttttttcta ttttgggaag
19861 ggtttaatta tgaaccttgg cctcctatac tgaaatcttg gaaaaacttc agctttccgc
19921 ttccttcctt cctcctcttg ctttattact ccttgcggaa gcaccgtgct acgtgggtta
19981 ataatcacta gatgtnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
20041 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnggtta
20101 gacttgcatg cccctgcggt tcgactgcta naggatcccc cagnatgaac aagactcaga
20161 gaagcaaaga gacctcctga aggtcacatg gggagtgaat gacagaacta gggccagaat
20221 caaggtccct gactattctt cagtcactca gcagacattc attgagtgac tagaatctgc
20281 taggcaccac tccgggtgtt aggtgtccat tgctgtcctt agaagcaagc tgcgctgctc
20341 tgctggggct tcccttctcc cctttcctgg atgcttttca ttcccagccc cagagtctaa
20401 ccccgagacc tccagggcca ctcaccacag cattcctgaa gacttagaag aggtgctttt
20461 gtgtgcagcc ctttcctcca agaccctgga atgcacgttc gcaggacttg ctgatttata
20521 gccatgttgc ctttcaaaga attccctggc ctgcgttaag tcaacagatt tgagaaaagg
20581 ctggttaaaa gttctgtcac gggagccagt tgttccttgt gttcgcagga tgctttcttt
20641 aaccctgggt cctgctcagg ccagtaacag cacaccctgg gcctacaact gctcaggatc
```

```
20701 tgggtgtaag acatggaaac tctgtcatat aaatgtattt agtgctcctc cctcgaatag
20761 cccctaaccc tggcatataa atgtatgtac tggccttccc tggaatagcc ctaagcctct
20821 attctctcat ttatcattct ggggttttac tgcctaatgg gtgtgtggat ctattagcct
20881 atttctattt tatgctctgg catgctgcca tcactganac aagggcctat cctgttggac
20941 tgccgacttt tgaaaaatca tgctgcttat tctgctccac cccctcctca aaatctgcct
21001 ggcgggaacg agagcaaata aannnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
21061 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
21121 nngcttagac ttgcaatgcc tgcntgtgcg gctctagnag atcccctgat cgacaataca
21181 agtgggaccg tggtcccaga ccgataatca gaccgacgac acgagtggga tcgtggtccc
21241 agactaataa tcagaccgac gatacgagtg ggaccgtggt cccagactaa taatcagacc
21301 gacgatacga gtgggaccgt ggttccagac taataatcag accgacgata cgagtgggac
21361 cgtggtccca gactaataat cagaccgacg atacgagtgg gaccatggtc ccagactaat
21421 aatcagaccg acgatacgag tgggaccgtg gtcccagtct gattatcaga ccgacgatac
21481 gagtgggacc gtggtcccag actaataatc agaccgacga tacgagtggg accgtggtcc
21541 cagactaata atcagaccga cgatacgagt gggaccgtgg tcccagtctg attatcagac
21601 cgacgataca agtggaacag tgggcccaga gagaatattc aggccagtta tgctttctgg
21661 cctgtaacaa aggacattaa gtaaagacag ataaacgtag actaaaacgt ggtcgcatca
21721 gggtgctggc ttttcaagtt ccttaagaat ggcctcaatt ttctctatac actcagtgtg
21781 gaacacgaga cctgtccagg ttaagcacca ttttatcggg cttatacaat actgtcgctt
21841 caggagcaaa ctgatgtcgt gagcttaaac tagttcttga tgcagatgac gtttttaagca
21901 cagaagttaa aagaagtgat aacttcttca ccttcaaata taaccccagc tttnttctgc
21961 tcatgaagtt anaatgctgc tgcttaataa tttctcttat ctgtaaggct gttgaatggc
22021 tacctgacgg gcagaagtca acgggtgaga aacnnnnnnn nnnnnnnnnn nnnnnnnnnn
22081 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
22141 nnnnnnnnnn nnnggcttta tactatgcat gcccctgcgg tttggctcta gnagnatccc
22201 ccgaanaagg agagaaggaa gaaaaggaga ttttgtcagg gctcttcaca aaatgcttca
22261 gaaaagaatg ggaagagtaa gatcccttttc agctatatat aacattgtat aatgttataa
22321 ttttactctt tatgttacag gaatctattg tttaaattta attgaggcca aaccctcaac
22381 ccaagaacac atcccaaacc aaccctccac tgagtaagtt cactgatttg aggaatgctg
22441 aaagaacagc cttccccaaa ctattgccac tgctggcttc ccatggggct ggaagctttc
22501 cccatgacca tcacactgtt gggacaaaga aagcattacc tggtgtaatc tgaaagccat
22561 tcacatgaat gatccacgta ctgcaggtac tgtccacaag tctaggaaga ttaaagtgaa
22621 aacatctcca gtctctgtat tggacataaa ccttgccctt tttcaagatt ccctcaattg
22681 ctgtcttctc tcagttggcg cctcattccc agtgtcacag atgaaatgct acatagtggg
22741 gcacggcacc tgagcagctg agaaagggct agatgatgcc acccagaagt gtaaggggcc
22801 ttaactctcc atggagtaaa tcttgaccac tgggaaacan gaaatgaaag agaatcagag
22861 tctggccata ccaccctgaa tgagcccaat ctcgcctgct ctcggaagct aagcaaggnt
22921 ggngcctggt tagtactcan gtggaaaaag agatcaggca gactatgtcc tgccttgatc
22981 cattctagaa tggcttctct ttaaaactct ccaaaaagca gggcgcggtg gctcggccta
23041 tattcacact ttgggaagcc gagctggcgg atacctgagg tcggcactca gacaagctgg
23101 caaattggga aacctgctnt actaaataca attaaccagg ttagagnnnn nnnnnnnnnn
23161 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
23221 nnnnnnnnnn nnnnnnnnnn nnnnnngcc tgagagtctt gcatagccct gcaggtttcg
23281 actctagnag catccccggt attaagtcct agtacaagaa caggagaaca ctcatgtctt
23341 agctcaagcg atcagagaca gagagaggtt tcagctttcc tctgcctttt tgttgtattc
23401 aagctttcga gattttgcgt gattcccccc agcattgggg agggcaattt ttttcacagt
23461 ctactgattc aaatgttaat ctcatctaga aatgcactca cagacacacc cagaataatg
23521 tttggccaaa tgtgttggca tcccatggcc cagtcaagtt gacagataaa attaatcatc
23581 acatttccac ccctcatcaa cttggcacct atacacctct ccataaacca tacttaatct
23641 ccagatagga caataaccac atcatatatg cacctaacat gggtaccgag ctcgaattcg
23701 taatcatggt catagctgtt tcctgtgtga aattgttatc cgctcacaat tccacacaac
23761 atancgagcc ggaagcataa agtgtaaagc ctggggtgcc taatgagtga gctaactcac
23821 attaattgcg ttgcgctcac tgcccgcttt ccagtcggga aacctgtcgt gccagctgca
23881 ttaatgaatc ggccaacgcg cggggaagag gcgtttgcgt attgggcgcc agggtgggtt
23941 tttctttcca ccattgagac cggcaacaac tgattgccct tcaccggctg gcccttgaga
24001 ggattgcagc aagcgggtcc acgcctggtt tgccccaaca ggcgaaaatc ctgttggagg
24061 ctgggtccgc aatccggcaa atccctctat attcaaaaaa taacccgaag taggttggag
24121 gtgtttcccc ttggaacaaa attcccttt aaaaacggac ttccactcaa ggcaaaaacc
24181 ttttaaggga tggccactct gacaacnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
24241 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
```

```
24301 nnnnnngcct tatacttgca tgccctgcgg tttgactcta naggatcccc tgtagtataa
24361 tcatcttaac ttacaaggta aggaaagcaa gggataaatt gtgaccagct ggagcacaca
24421 gtaagcagca gcactgggat ctgagtgtcc aatcagctcc agtggccatg ggatttactc
24481 cactgtacca ctgctaatcc ctttatgttt cagtcttcac atataaacag tgaaggtgct
24541 gggttatata ttcactaaga ttccttctaa ttctaaaggg actgctattc taagatgaaa
24601 cacttccagg atccatcctt aaattggttc ctgctgtggc cacctgaaac caaccaacct
24661 atctcaactc cactgtatat tcagtggtcc ctgctgggcc ggcccagttg tggccagaac
24721 tctaggatgc cattttaaaa ataatattaa gtgatcagat ggataaaagt gtcaatctgg
24781 gtgaatttca ggtgcacctc ttacagtttt ttaaaatagc agactgtgtg ctgatttact
24841 gtggtgaatt gaagatccca ggagtggtct aagggtaaag tcgatgggcc cacaaccaaa
24901 gagcaagatg ccaaggctga aagaattctt tnttttttta atcaactgtt gtttttgtgt
24961 gaccttgttt acgggttaga gatttctgaa ctctcttgga gaaggtccac tggttgctgc
25021 atagaacaat gggctgagta ggtaataaca acccatcttc agaggctgcg tgataaaagc
25081 caagccctgg gcttggcata tctagttcga cacatcaggt ccacgggtat atttaaccct
25141 tttacctctt ntcctncctc tgggatgccg gggcattctt tggtccaggg cagactgcct
25201 ggaaacgaat ctctctggag aggggggctg cacactaact gagcctctac aaagctatca
25261 aagaacccag cagggnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
25321 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnngctag
25381 aattgcatgc ctgcggttcg actctagnag atccccgatt gactcaagtc cacaggccac
25441 acctgcctat agccacaatg cctgccgctg tgagatacca cctctcggat cccttttcaga
25501 tgaacttctc caaggtgcta tgattctttt agagtacagt tatttgcaaa aaaaaaaaaa
25561 aaagagagag agaaaatact ttgagtgaca ggagaacgat ggttccatgg atagaaatat
25621 gaaacagaga gggataacag ggaaaaaaaa atgcattctg gtttgcaact agtgaatttc
25681 ctagtgctgg cagagatgtc caacaggcac ttggaaactt caactagaac aagggacaaa
25741 agccagagct gaagataaag aactaaatcc cttgcaagga ggtaatgact gaaattaagc
25801 aactgaaaga gaatgccaag ggaggagccc tggaaagagg aagggtccat ccttgggatc
25861 aactgtctga ggatgcagga aacagagaag gacatatagg tgctgagtag gagaacctca
25921 aggatggcgc ttctgaagca aagttaaaaa gaatctgggc cgggcacggt ggctcgcgcc
25981 tgtaatccca ncactttggg aggtcgaggc gggcggatca tgaggtcagc agatcgagac
26041 cgtcctggtt aacgcggtga aaccctgtcc ctactaanaa tacaaaaaat tagccgggcg
26101 tggtggcggg cgcctgtagt cccanctact cgggaggctg aggcaagaga atggcgtgaa
26161 cccgggaggc gggagctgca gtgagagatt gcgccactga cttcagcctg ggagacagac
26221 aagactccgt ctcaaaaaan aaaaaaagaa gaagaagatc tgcggaggcg atggccacaa
26281 tggcaatgcc actcttttgg agtgaggaga tcagaccagt gagaaccacg ggnatgacnn
26341 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
26401 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnggg ctagacttgc atgactgcgg
26461 ctcgactcta ggagatcccc ccaaagcacc tgggggaaag gcggagtatt tgtgggtaag
26521 gaacatgcct tccagccttg ttctaaaaac caaacattag tagtacattc cagttattcc
26581 tcaaaggaat tatttttttc cagtaccctg tattaaatta attttgattt tgcacctagt
26641 ctcactgctt tagatcataa cctgagtgtg acttcccttt gctgagcagg aaaagtcttg
26701 cctctctaca tctctatgta tcactttcaa atacaaaatt ctgggtttct tattctaaag
26761 aactgctttc tgctcttgtt tctcatggcc agcagaggga ctccagagaa accctcagac
26821 agagcgtggg attaggccac tttgtggtgg tgaaagatcc cccagctctc tagagaagtg
26881 acatttaacc ctagggtttc ccagcacaca tacaaaaggt ttgagaaata gagccaggtc
26941 tctcaggacc acaggtaaca ataatcttta cctgaggctg agaagagctt tgtaatcaca
27001 tccacccctg gcagagagaa agaaagcagg ttagcactta aaaaaaaaaa aaaaaaaaaa
27061 agaattgtga aaactgaagg agaaacaac cagaaccgtg gacacgagcc attattcctc
27121 gttgacgtca canccctcca gagctgcaga gaggggatat ttgggagact agggacccaa
27181 ctcaatttat tatgtttgtg ttggctgata aacttcacaa aggtcctagt catcactgaa
27241 atatttagtc acttggaaac ttttgtcctt tattcccatc ctatanacca tgagcaattg
27301 ttaggaaata acggtggttt ggcacacatc tggagacatg tgaaaatatg aatgcttttc
27361 cctggtgggg gatggtattt atctacccct tggaaaaagg tggggattcc taagatctaa
27421 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
27481 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn gcctaacttg cataactgca
27541 ggtcgactct anagatcccc acccgggcct gttgtggggt aggggaggg gggagggata
27601 gcatgaggag agggacctaa tgtaaaagac gagttaatgg gtgcagcata ccaatatggc
27661 acatgtatac atatgtaaca aacctgcaca ctgtgcatat gtaccctaga acttaaagta
27721 taaaagaaaa caaaaaacaa acaaaaaaac ccctgcacat ctgtgcgtgg gaactttaaa
27781 aatccacaac acaatggaat aagagcgggt accgagctcg aattcgtaat catggtcata
27841 gctgtttcct gtgtgaaatt gttatccgct cacaattcca cacaacatac gagccggaag
```

```
27901 cataaagtgt aaagcctggg gtgcctaatg agtgagctaa ctcacattaa ttgcgttgcg
27961 ctcactgccc gctttccagt cgggaaacct gtcgtgccag ctgcattaat gaatcggcca
28021 acgcgcgggg agaggcggtt tgcgtattgg gcgccagggt ggttttcctt ttcaccagtg
28081 agacgggcaa cagctgattg gcctttcacc gcctggcctg gagagaattg cagcaagcgg
28141 tccacgctgg tttggcccca acaggcaaaa attctgggtg gatggttggg tccaaagtcg
28201 ggagatgccg cttaaataa aaggaatagc ccnaaaaagg gtggaagggt tgttccagtt
28261 ttgggaacaa gagtgccctt attaaagaac gtggcctccc aaggtgaaaa gcgaaagacc
28321 gggtataagg cggagcggcg ccatccggga cgaaacacaa tagtaagttt ttggggcggg
28381 gggcgcgaga ggacttatcg ggaccgtaga gggcgccggc atgtaaactt gcaggaaaag
28441 gggcgacggg ggggggaggaa ggggaaggca agagcggggc gggnnnnnnn nnnnnnnnnn
28501 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
28561 nnnnnnnnnn nnnnnnnnnn nnngctggaa cttgcatgcc tcgcggctcg tactctagna
28621 gcatccccgg ctgagttcat gtcctttgca gggacatgga tgaagctgga aaccatggtg
28681 gtgaggaaac taacacagga acagaaaacc aaacactttc atgttctcac tcataagtgg
28741 gagttgaaca atgagaacac atggacacag ggaggggaac ataacatact ggagcctgtt
28801 gcggggggtg ggggactagg ggagggatag cattaggaca aatacctaat gtagatgaca
28861 ggctgatggg tgtagcaaac caccatggca cgtgtgtacc tatgtaacaa acctgcacat
28921 tctacacatg taccccagaa cttacagtaa aaaaaaataa actttaaaaa ggatatgaac
28981 tctttgtttt aataaaatgt atattataat caggcacagt ggcccacacc tataacctta
29041 nctctttggg aggctgaggc aggcaaatca cttgagctca ngagtttgag accagcctgg
29101 acaacacggc aaaaccccat ctctaaaaag aacagttaca caaattagcc aagtgtgatg
29161 ggtgtggtgg tgcatgcctg gtatccagct acatggaagg ctagagtgcc aaggtcattt
29221 gagccangag gtcgaggctg canttanccc agatcacacc actgcactcc agcctgggca
29281 acaacgagac cctgtctgaa aaaataaata aaatgttttt acagtcagac aggctactct
29341 gtgattcctg atgggccact ggctctaata aaaagcttgg tggatttctt gcacatgcga
29401 tggctnctca tcacggtctt tgggctgtcc aaaatgaacc aaatcgggtt atttttatct
29461 agacagatgt aagcaataaa attgtgggac ttcccgttca gggttatagg acggatccag
29521 gtgcacaaaa acnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
29581 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nngctagact
29641 tgcatgacct gcaggctcgg ctctagnagg atccccgacc atgctattag ttggttcagg
29701 catgcacaag gcataatgca ggtggctgcc aaattcaaag gagttgccta cagttctgtt
29761 tcttctggga atgccctctc atgaaatctc aggtggttga aatgaagaga ctttcatgaa
29821 gggacagctt gcagagatga cgcagggctg aaagaatgaa ctaggggatgc tgaagctcca
29881 cagactaaca tcagtgggaa gccaatccca tccttacagc taagaaggat gggagggggac
29941 cattttatca gggaacccag agagactgac tctgcagagg aagagactgg ctctgccaag
30001 aaagagcctc ctgttgggag agaagtggct cctgccgaac acggcactag gggaaggcag
30061 gaagaaatgt cccatctctc tcttctcccc atcaggctcc tgcccgtgcc tctcatgggc
30121 aagcaaaagg gtgagggagc ctgggtggag cactcggcaa gggtcagtcc tcagggtaca
30181 gaataggtg ggaaaggctg cctcaccctg cacatgtgga gaacggagaa gggagagcac
30241 catgtctctt tgaaaaggag taaactgagg tattgggagg acaaggaaca tgtgccagat
30301 caaaagggc atgcagaacg agatgagggc ccacttgccc tttcctctgt gggctcctgg
30361 gctcgagaag ccggatgcct ggaattatgg aaatctcaat ggactgcatg ccttaggtcc
30421 ttgcaatctg gggggggaca aaggcgtgag ggatcccttt ttcaaagtgg ggggggggggc
30481 aaccggatga ccagactctg ctggttactg gagagtgtaa ggataactgc gtggggccac
30541 tggggttttg ttctttagga acggtccaaa tnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
30601 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
30661 nnnnnnnnnn nagccttaga ttagcatgac cctgcggttc ggctctanag gatcccccctt
30721 tgatgagttg agagaaaaag gcttcagaag atcagtaata acaaactggg gtgagctaaa
30781 ggaggatgtt cgaacccatc acaaagaagc taaaaacctt gaaaaaagat tggacgaatg
30841 gctaactgaa taaatagcgt agagaagacc ttaaatgact tgatggagct gaaaaccaag
30901 gcacgagaac tatgtgacac atgcacaagc ttcagtagct gattcgatca actggaagaa
30961 agggtatcag tgattgaaga tcaaatgaat gaaatgaagc cagaagagaa gtttagagaa
31021 aaaagagtaa aaagaaatga acaaagcctc caagaaatat gggactatgt gaaaagacca
31081 aatctacgtc tgattggtgt acctgaaagt gacggggaga atggaaccaa gttggaaaac
31141 actcttcagg atattatcca ggagaacgtc cccaacctag gaaggcaggc caacattcaa
31201 attcaggaaa tacagagaat gccacaaaga tactcctcaa gaagaccaac tccaagacac
31261 ataattgtca gattcaccaa agttgaaatg aaggaaaaaa tgttaagggc agccagagag
31321 aaaggtcggg gtacccacaa agggaagccc atcaaaccaa tagatgatct cttggcagaa
31381 actctacaag cacaaagaga ggaggccat tattcaccat tttaaagaaa agaattttaa
31441 cccagatttg ctatgcaggc aactaagctg ctaagggaag gagaaataaa tctttgcana
```

```
31501 ccagcaatgg tgagaaattt gtaccaccag cctgcgctaa agactcctga ggagccctaa
31561 ctggaaggac actggttaga cctgcaaaca gccaatgaaa gacttgtgct ggaaaacgct
31621 aacaacacaa gnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
31681 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nngtctanga
31741 tcatatgcat gaccctgcag gttttcgact ctagnagaat ccccacaagc accaagcact
31801 atgctacata aataattcat acccaccaca ttaggaagct tatggcgatt gtacagataa
31861 acataataga tgtgttagct ataggtgcca atacattccc taagtgcgtc aacatttgtc
31921 attgggataa gtgtgtatta aatatttgag ggcacgtttc ataagtaaaa ttccaattca
31981 aatgcagttt attccatctt cttgcatggg ggtagctgaa aagagccagc tgcccatcct
32041 acagaatgag tccagaaagt gatgcatctg atgtctacag tttgccaaca aagtcattct
32101 ccccacttta gtctcttggc aaggagaagg caagcactga ctggtacaaa cctgccacct
32161 gcaggagcca agaggaacaa acccaaattc cagggaagta cggtgaccag aggggggccat
32221 ctaacaacag accatcctgg gatctggctt cacccctcag tgtgagccaa caccctgtca
32281 ctgatcccgc ccacctccat tcttaatggt gaagcctggt gaaattgaac actgaggaag
32341 ctctcaagaa acgaaggcat ggaaactttg catggagtga agtcaggctg acctaagcac
32401 caatcccaac gtggccactt accagctata tcactgtaac catgtgcgtc aacctctgta
32461 gacctcattt tattggctgt aaaatgagat actggcaatc aatgtctgtt gaatgaatga
32521 aagaacgacc aatacttttt ggttggtggg atagaaaaca tggttttgaa aaggcctctg
32581 gagtacatgc caaatcaaaa ataatgaggt aaaatcttta tttaaaaaac caacttctct
32641 gattgaccac tggataaact aactaaattt gggannnnnn nnnnnnnnnn nnnnnnnnnn
32701 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
32761 nnnnnnnnnn nnnngctttg actatgcaga ccctgcaggt ttgacgtcta aaggatcccc
32821 tttattctac cacccatgaa cctggaagcc acctggtgac atctttctct gtgaggagag
32881 aaaggtggag atattttctc tgccctgccc ccgcaacccc gccacccccc tacaaccaaa
32941 aaaaaagaaa aagaaaaaag aaatcttagc ctaggtcaat ctcccgaagc atttccccaa
33001 tgttttctgg tagtttcatg tcttacattt aaatctttaa tccattttga tttgactttt
33061 gtatatggtg agagataggg gtctagtttt attcttctgc atatagatat ccagtcttcc
33121 agcacctttt attgacgaga ctgtcctttc ccaaatgtat gtcttggtgc ctttgttaaa
33181 aatgagttga ctgtaaatgt gtgaacttgt ttctggaatc tcaattctgt tccattggtc
33241 tacgtggctg tttttatgcc agtatcatgc tattttggtt actatagcct tgtagtataa
33301 tttgaagtca agtaatgtga tgcctccagc ttaagtcaat ttacatagat tttgtgtatt
33361 cgtttggatt ttctttttaa tcactgaaaa agttctgact gataaaacgt tttaaaaaag
33421 aacttggagt tgtagctgga aaattagctc tatagaaata aacagcggtt gtataaatta
33481 gtaggaagtc tggctgaatt accaaatcta gtagccatat tgaaggcagg gataggcctt
33541 ttccattcta actggtcagg gtcatattgg aggctatggt ctcactgaaa acagggttta
33601 gtggctggag aacattanaa ggggagtgac tgggaggatg aatggacttt atcatggccg
33661 ggaagaaggg tgaggagaaa agggcctctc tgaaaaatcc aggggctgga agagcttaca
33721 aataagaatt tttatnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
33781 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnngcctg
33841 agaaagcatg cctgcggttc ggctctagag gatccccgac ccatacctat tgataaccaa
33901 gtttggctcg catgctaaag aggatgtctg ctacgttcat ccagaatggc ttgggttatt
33961 tgcccaatta taagtctact taaaaataga tgaaattatt attatgaaga ataataggat
34021 aaccctctat tttgttcaga agcaggcttc ccaccttcct acattcgcgt ctaggtaaac
34081 ctcaaaatta tccagtaaaa tgagaaagat gactgaagat ttttcctcct tatactgaaa
34141 gcaataaaaa tcaaaatgtt gtctgggcag ggtggctcac gcctgtaatc ccagcacttt
34201 gggaggctga ggtgggtgga tcacgaggtc aggagatcga gaccatcctg gctaacaagg
34261 ttgaaacccc atctctacca aaaatacaaa aaattagctg ggaatggtgg cgggtgcctg
34321 tagtcccagc tactcgggag gctgaggcag gagaatggcg tgaacccggg aggcagagct
34381 ggcagtgagc cgagatcgcg ccactgcact ccaacctggg cgacagaacg agactctgtc
34441 tcaagaaaaa aaaaaaaaa tcaaaatgtt aataaatgcc tggagaagaa ggaagataat
34501 gataagaaaa gaaccttttg ggtttctgaa agtctggaag gaaaatcaac aaaaatgcat
34561 caaacttcag agtataaata ttgaatatga ttctgtagaa ttgaccatta tatctaagtc
34621 taaggtagag caagtatttt tctggcattc cagtcttgag tctagtttac tgagcataaa
34681 actgttctag tggtaatgtc taaacatcag tctcgataaa gaaatgaact aagaccaaag
34741 aagctgctgg caattannnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
34801 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnagct
34861 agaattgcat gcctgcggtt tgactctagn agcatccccc aaactcctgg cctcaagaga
34921 ttcttatcat cctcccaaag cattaggatg gtgggcatga gccacagcgc ccagccctag
34981 caatattttg aaaatcaaaa gcatttccaa aaataaggga taaaaatgat agaggcagag
35041 tggatgaata ttttcttttg tggaacccaa gagttatggc taacatatag agtaataaaa
```

```
35101 atagtgacaa tgaaataata ttagttattg tgaacttgtg tcaatatatt ttaagcgcat
35161 ccccatcaga gccttacaaa gccctacgag gcaggtactc accaccagag actggataat
35221 ttcagtttcc agttgtgagc cttgttagct ttggtttcaa gagatattct acttcctccc
35281 cagaaaccca cggggaagct aactgggtag gagagttgtt caaaggtcta ccttataaac
35341 tgaaaataat gcatgaagtt gcaaggtttc tgtgtgggat ttggactcan tcccatttca
35401 tcttgggaag ctntctttgc ctgtaagggt ttctcagatg tccacttttg tctgagtctt
35461 gtggccataa aactgccttt accaaaagtt tattttaagg gctatgactc ggggacataa
35521 agaaatgttt gaagaagggg aaagggataa aagcatgcaa gattctgtat ggatgggaca
35581 tttgaacagc cacccactgn cttagttgac acatggtggg agaccttcaa aaaccacact
35641 tgggtaacag ccttaatgac ttggttagct gatggatcat tggttaaggt tggtctcact
35701 attctattta gagatggtac ataaacaaac tgcttttcgg agtcagaaga ctgtgctaag
35761 taaaaaaggc aagacaggct atctnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
35821 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
35881 nnnngtttaa tcttgctgac ctgcaggttc gactctanag gatcccctta acatctgtgg
35941 ggtaggattg gttgagtaga agcttgaggc taaggaatgt ggagaacaac gaaaactggg
36001 gaaggtggtg ggagggactg gaagataaag aacaggggag acaaagcagg ctcttaaagg
36061 gacaacgcca agcagatgac tcaacccaca atcagggctc actttaacaa ctgtgtcata
36121 atactagtcc tcaccggtgg agatttcagt tcagcatttc ccaacattag agcaagcctg
36181 gttaagcctt actgaaaatc ctcaagaccc tctcctctca aactcttcct gcaatccttt
36241 tgggaggtcc tagggggtgcc ttgagtccat gtcaaacaag tcctaaccac cacatggagg
36301 tcatactttt tcttcctctc cagagaggta cccagagatc ttcactatga ccaccattgc
36361 taccagtgca gcttcttgca tttgctatgg cttgcatttg ctattgctgc ccactgatgg
36421 caggtgaatt cactctggac cagccccatg ggaggggggtg ctgctgagtt aaatagcttg
36481 cctttccaaa caccacccgt ttctgcgtga cctgtcgtga ttggatgaag catggcccaa
36541 gtctacagag attgctttga agcctactgt gtgatgggct attggggcgc tgtctgttaa
36601 actgcaggcc aatgtgggaa gaaatttgga actggggtca caaatctttg tggtcatttc
36661 cttggggggg tgggtcaatg ggaaggcggg ggtgcggggg gagaggttta aaactttaga
36721 atgggccag acaggcccag gggttaccta actttgaggt caactttgga aaggaggggg
36781 tggggggttgg ggagggcgtg ggaagaacgc ggagtggtnn nnnnnnnnnn nnnnnnnnnn
36841 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
36901 nnnnnnnnnn nnnnnnnngc tagaaaagca tacctgcggt ttgactctag naggatcccc
36961 ctgggcaaag taaattgaaa acctttgctc tattagtttc tgccagagaa aataaaaaaa
37021 aataagaaaa actctggaaa gaattaacta ttcaagatac ccttaaaaac attcatgatt
37081 cgtggctcat gcctgtaatc ccagcacttt gggaggccaa ggcgggtgta tcatgaagtc
37141 aggagattga accgtcctg gctaacatgg tgaaaccca tctctactaa aaatacaaaa
37201 aaaattagcc gggcgtggtg ggggcacct gtagtcccag ctacttggga ggctgaggca
37261 ggagaatggc atgaacccag gcggcagaac ttgcagtgag ccgagattgt gccactgcac
37321 tccagcctgg gtgacagagc gagactccgt ctcaaaaaaa aaaaaaaaaa attcatgatt
37381 cgggtttgga agaagttaat ttcaactctc caaacaggag ttttgaagaa gtcttaaagg
37441 agttcagaac ttcagtagag gaagtaactg cagatgtagt ggaaatagca agagaactag
37501 agttagaagt gaagcctgaa gatatgatta aattgctgca atctcatgat aaaccttgaa
37561 tggatgaaga gttgcttctt atggatgagt aaaggaagtg atntcttgag atcatatcta
37621 ctcctgggga gacactgtga atatgttgaa aatgacacag agatntagat atacataaat
37681 tanctgataa atantgtaag gtggagagaa tgactcagtt tgaaagattc tacgggggta
37741 aatgcttcaa ccatataatg tacatacaga actcttgatg aagaaggagc atggtgcaca
37801 acttattgtg gtatttagac tggctagtta ccacctgaca gcccaccaat atgggagcat
37861 actgaggaga cctnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
37921 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnngtttaaa
37981 ttgcatgcct gcggttcgac tctagaggat ccccganaac agtgagctct atgttaagtg
38041 ctggccatca ttaagactgt tacgtgaggc gttgaaacgg atcctgaaaa gatcacatga
38101 gcaatgcagt accagcgggt gctcttatag agactcggag atactgttgt tctgtggaag
38161 taatcgtgta gcagtcttca ctaactttag ggttattctg agtcttttaa ttccttcaga
38221 tgtgctacca acaattctag aagctaagaa ctttgactgg ggacctacca caagacttat
38281 ggagtgtgcc tgaaatggcc tttggctgta cccccaaatt cacgcacacc actacagaga
38341 gggtatatct ggggtccccg ctccccaagc cacagttcca gtgaacaggc tacaggagga
38401 gcctcctcta aagtgtcaat aatgattgag tatatataag gttgccatta caattaagca
38461 aggaaaggga gaattaacta ataactgact attttgaaaa aaattgattg cagaatacaa
38521 aaagaaagtt tacaaattta tattaagtac aattcaatat caaataaata agcacaaggt
38581 ttcataagt tatttctaat cataaaagca gtgaaatcaa tttaaaaatg cagtatccat
38641 agattttgac tatataaatg ctgaaaagat atgtgtttac caacaaaacc aaactgagaa
```

```
38701 ccttattggc aacaggggaa gggtactgta gcattataac agatgaaagg ttagtgtctn
38761 tactggatat aagcactntc tttntttttt tttttttttt tgggaactat cttcgtcttg
38821 cgccagctgg gggcagggcg ccgacttggg tactggagct ccgctcccgg ttaccctttt
38881 tctgcctacc tccggggggcg ggactcggcc ccgcccgaac cgttatttttt ttttttagacn
38941 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
39001 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnt ctttaacttg catgcctgca
39061 gttcgactct aaaggatccc ctctttgctt cctcgccagt tcgctcgcta tgctcggtta
39121 cacgggtgcg gggagcgcta gtgataataa gtgactgagg tatgtgctct tcttatctcc
39181 ttttgtagtg ttgctcttat tttaaacaac tttgcggttt tttgatgact ttgcgatttt
39241 gttgttgctt tgcagtaaat tgcaagattt aataaaaaaa cgcaaagcag tgattaaagg
39301 atgttcagaa tgaaactcat ggaaacactt aaccagtgca taaacgctgg tcatgaaatg
39361 acgaaggcta tcgccattgc acagtttaat gatgacagcc cggaagcgag gaaaataacc
39421 cggcgctgga gaataggtga agcagcggat ttagttgggg tttcttctca ggctatcaga
39481 gatgccgaga aagcagggcg actaccgcac ccggatatgg aaattcgagg acgggttgag
39541 caacgtgttg gttatacaat tgaacaaatt aatcatatgc gtgatgtgtt tggtacgcga
39601 ttgcgacgtg ctgaagacgt atttccaccg gtgatcgggg ttgctgccca taaaggtggc
39661 gtttacaaaa cctcagtttc tgttcatctt gctcaggatc tggctctgaa gggctacgtg
39721 ttttgctcgg gggaggtaac gacccccaag aaacaggcta atggatgacg gatgggacca
39781 gatcttatat tatgcagaag aactctcctg ctttcttctg ggggaaaaga acatggccta
39841 tgcataaagc cactgctggg cgggctgaca tattcttcct gggggcttga cggttggaac
39901 gggtaatggc aattggtaag gaactgccaa cgtccaacgg agcgcggtgg gctnnnnnnn
39961 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
40021 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnngccttga ataagcatac cctgcggttc
40081 tgactctaga agcatcccct acttgtcttc agagaggaaa gtctgttacc aagtcctgct
40141 ctctgtgtgt gggtgggaat tctctgggga atgtttacat gtttcattaa tcattcctca
40201 gtcactgata gctcaaccaa cgctgcatcc ttggacccat tatctcctgc cattcagcgg
40261 ccaccacatc cgcccactct tgtctctgct gaattccttc tgaatcatgg gccctgccct
40321 ttagccccct gctgtgacag ctgaggcaga ttggctgtgt ttgcaggaca tcctgaagct
40381 tagagataag aaggagctaa cgtttagaca acttgaaatt aggtaccaca gactggcccc
40441 aaggacatga gtatattaga gattatctat atgctcccct cgttactcag caaaaccctg
40501 ttcttctgga tcgcttccat gttgatggtc agaggaattt aaacagtcgg tcttagtaat
40561 tgtcatgaag gagtatttca caaagcttct gagtgaatca tcacatgttg gtaagcctga
40621 ctagatcaac atccagccct ccatctgctg aatttattgg caatacactg tctaaatggg
40681 aggacataat ctgctgggga cccgtcctgt ttcagaataa atgtctgctg gagacctctc
40741 tcacatagga tggaactaat cacatctgcc acattcaaat atgcagtgtg attgatcact
40801 ggtgtgaaaa atacttgccc tattaggtac cgagctcgaa tccgaatcat gtcataactg
40861 gttcctgggg aaaatgtatc cgctcacatt cacacaacta cgagccggag cataaaggaa
40921 acctgggtgc ctaatgatga ctactcactt aatgcgtgcc tcactgccgt ttcatcggaa
40981 actgccggca ctgataagcn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
41041 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnng
41101 ccttgacttg cataccctgc gtttgactct anaggatccc cctgtagcct ctgctcanca
41161 gttctgcttc ccaggctccc tgggacaaat tctgagcccc ctgctccttg gccctacccc
41221 gaaacgggta ccgagctcga attcgtaatc atggtcatag ctgtttcctg tgtgaaattg
41281 ttatccgctc acaattccac acaacatacg agccggaagc ataaagtgta aagcctgggg
41341 tgcctaatga gtgagctaac tcacattaat tgcgttgcgc tcactgcccg ctttccagtc
41401 gggaaacctg tcgtgccagc tgcattaatg aatcggccaa cgcgcgggga gaggcggttt
41461 gcgtattggg cgccagggtg gtttttcttt tcaccagtga cgggcaac agctgattgc
41521 ccttcaccgc ctggccctga gagagttgca gcaagcggtc cacgctggtt tgccccagca
41581 ggcgaaaatc ctgtttgatg gtggttccga aatcggcaaa atcccttata aatcaaaaga
41641 ctagcccgag ataggggttga gtggtgttcc agttggaaca agagtccact tttaaagaac
41701 gtggactgca acgtggaacg gcgaaaaacc gtcttcgagg ccgatgtccc acttcaggag
41761 cctgcgccgg gctgggcggt gggtgcgggg ttcgtgcggt gcctcggtgg cgccgtttgt
41821 gtctttctc tgcctctcgt tgtttatgcc cctcgctctg ctgctttttc gccgatttgt
41881 gggggggggg tctgggggtg gtggtcgcgc ggttcggaaa ggtctctggc gccggganag
41941 ctgtggcagg gcgcccgata cgctcataac actgggtaga tgttaattaa aaaataatat
42001 aaagnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
42061 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnngctaaa aatgaatgcc
42121 tgccgtacga ctctaaagga cccctccttc ccttcttttg cctgggtgtg gatgctgttg
42181 ggcctctct ccccgtgctg agagaccatt tgggttggag gagtgctgat ggtgcctcaa
42241 gctcggttcc tgctgcaagt ccatgtggtt ctgccccatt gagctgcacc tcacccaaca
```

```
42301 ggccatttat tggaaggata tggaaagaaa ggatgaggat agaaaaacaa tgctctcttg
42361 tagcatgaac tgtgaatggg tttgagtcac taggagatcc catcttccca cctactttat
42421 ctcaagtatc atcttattct aggctctgac aaacaactct gcaaaggagg tagggctttt
42481 ctccccacaa aaggaaaact gggcacttgc catgggaccc aaggagatat ctgcactgtc
42541 tatgcttttc aggttttttgt tttgtttcgt tttgaatcca gaatctacaa agtacttaaa
42601 caaatttaca agaaaaaaat caaacaaccc catcaaaaag tgggcaaagg atatgaacag
42661 acacttctca aagaagaca tttatgcagc caacagacac atgaaaaaaa tgctcgtcat
42721 cactggccac ccgagaaatg caaatcaaaa ccacaatgag ataccatctc ataccagtta
42781 gaatggcgat cattaaaaag tcaggaaaca acangtgctg gagaggatgt ggagaatang
42841 aacacgttta cactggttgg tgggactgta aactggttca accattgtgg aaaacagtgt
42901 gggtaattct caaggatcga gactagaaat ccatttggac cacccatcca ttactgggat
42961 atacccaaag atataaatat gctgcataaa gacctgcccc cttatgttat gggggcctnn
43021 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
43081 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnag cttagaagat atgcaataac
43141 cctgccggtt tcggactcta gaagaatccc ctttctattt gagtaacatg tatcccatag
43201 gagcttgtag tctggtttgt gagcgtggac acaagtgcct ttcaggagtt cacagtgaag
43261 tgtaacagac acatacacag gttgaattac aacacagcta ggcttgccag atttagcaaa
43321 taaaaattag aatgctcagc tcaatctgaa gtttagatac ataacaaata attgtttcat
43381 atgtgttcta aatatggcat gagacctatg tgtaatacaa attattcatt atttatctga
43441 aattcaaaat taattgggca tcctccattg tacctgacaa ccttaattta catgacatag
43501 tagctactat ccatgaatat aaatagaaag ggctgtggga acacaaagac ctgaacaaac
43561 aacgacctgt cccccttctca ggcgaaggaa aataaagaag gccttcaaat aaggagcaat
43621 gttgccaggt aatgaaacca ggaactgcac ctgccagtga tctgaataaa cccgatcaga
43681 atatttggga aattgtgaaa tgcttgtgca gtctggagca taaggtgcca tattgtaggt
43741 gccttgagat cagctaagga ggtttgatac tattcagtag gccctgggaa ccctngaaaa
43801 atttatgcag gggagtgaca gggtcagact tgtttttagg gtaagaactc tggagtaggg
43861 aatgaactta ngaaacagga agttaagatg agcattagga agcagtacag taattaaaga
43921 aggttctgat aagggtgaaa ctaaccaatg gcttggagaa tagagagaag ccaattgaga
43981 gagatgactg taacatgtag actgggcggg caggcttggc agtgacacat gacttgatgt
44041 ctactgggag atggaaannn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
44101 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnngct
44161 agaaaagcaa nactngcggt tcnggctcta gnagaaaccc catttctaac ttgttctgta
44221 tcaatctctg tatttttggc ttgttaataa ccagtatcta ttgtcttgta tttgtaataa
44281 aaatatgata tactaaattc aaacaaagtt ctatattcta ggcacaacca gattttgga
44341 taagtcaaat agccatatag tagatgcttg ttgaatctaa taataaacac cagcttcctt
44401 tgcccttgga taggatgatt ctgaggcatg gtgtttttact ccgtttgcca tttcccttttc
44461 aggattaaac tccttcaggg ttaaactcca ctgccacctg tgagaatagg tctaataacg
44521 ttctttttat gggctgctgt tccctccctg tattactttc ccacgttcct actgatattt
44581 cctgcacttc tcaataagtt acttgcattg gaatcattgt ctcagggtct gcttttacgg
44641 aaacccaaat taaaatattt ctccacaaga gggtacattt cataagggca gggtctttgt
44701 ctactctntc tttgtctgct ttgtccactc catgtcctta cagcctanca cagagagggg
44761 cacaaaggag gtgctcagta catntcagtg catgagtgaa acttcactga agaactttcc
44821 ttgctcaagc tgacaacctg ctcactgaca ttgtaacatt ggaacccaat taaccatcct
44881 tcatggggta agaactttct gacaagaact tctgtagtcc ttgaaattgt ctagtctaac
44941 aagaaacatg tactggaaga ttggttctaa ggtttctgga attggctctc aaatctgata
45001 aaattaaggt atctaatacc tttattctaa ggagtaagaa agccttgata gccctggggg
45061 gaagggcaa taaaatatgc aaaagaggcc ctggatttct catttatgtc gggcaacggg
45121 cggggggnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
45181 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnngt ttaacttgnc
45241 atgcctgcag gtttcgactc tagnaggatc ccctaaatcg gtgaaggtca cacactcagc
45301 aaacggcaga tccagctctt aacctgccca ccctctcata ccatccccag ccccagccaa
45361 agtcccttgg ctcacggcag gcctgagatc acaggaatga aaaacctcag ttaaagaaaa
45421 aatcagaaat atgagtttct ctgtcacaaa gcaaagagca tctaagtaga agtgtactta
45481 ccagcaagat tgaaagctgc aggaaaaaat atggaagcaa atatatttcc ccagaaatga
45541 ttttcactaa actacaaatt ttttaaccat taagactttc tctactgcca aataagaatc
45601 aatagttatc ttttcatgga tattaaaaac cccttgtttt taaaagaaca gtaaataaat
45661 aagtttcacc agaaaattct tgaccgggta ttcttaaagt gtggtttgga aactttaagc
45721 ctctttcagg tcaaaactag ttttcatgat aacactgagg catcaatcgc cttttttcatc
45781 tcgtcctctc aagtgtgcat tagtgctctc cagaagctac atgatatgtg atatcaaaca
45841 gactantggc agaaacagat atgagaatcc acctgtcttc tgatagaaag catttctcaa
```

```
45901 agagaaattt ggccagatat caaagagatg gcaaacattt tatagagact acatcagggt
45961 attttgataa tttttgctta gaaaaaagca tgtcatagaa gggggattta aggccatggt
46021 attgggtttt taatgggagt cttaaaataa aaacttttta aggcttccgg ggtttattca
46081 ggttaggacc tgtgggggtt tactcaactt accaaattcc ttggggcctt ttcttggaga
46141 aggagagagc ctggaaccaa cacgagnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
46201 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
46261 nnnnnccct agaattgcaa aacctgcagt ttgactctag aggatcccct tctttccaca
46321 catcatggtg gtagaatttc attttgggaa tgagctcaga tgctaaaaaa ttcctttctt
46381 tgtaattgta gctggattca aggttgtctt actttctaaa atgatggttc ttactagtgt
46441 aaggattggt accctatatt tttgtttcat ttggcattgc ctcaagggtc ctcctgaaag
46501 tgcagttggc aaacatttat ttttataaga tatatacaca tacataatac atattctccc
46561 acccagttca ccgtcaccac aaaacttgag aacatcttga aaataactgg tgatcctctg
46621 aatggctcca aatcaagacc caaattactt cattactttt ctaaatactt gtgcaatata
46681 aatgggctgt gaacactcag tcaagtaaag ggaaatttcc tgccgctttt ttttcttttt
46741 cttttttttca tttgggctga tgagaaataa gaataaatcc tcttagagtt aataatgtga
46801 aaaccaaagc tttcaaaagc agctcaaagg cagcggttgg tattgcacac tntatttang
46861 aacattttac tacaactgct tacttctcct ttcttcttct tctttcttca acttctggtg
46921 ggcccgcaaa aattgtagtt gtcttatgtt aaaattctgg tgaccagtta aggggcaaac
46981 atcaggctta ncattggtnt ctgtactaag cagtgacaga aatcacgatt aagctgtgat
47041 gcacataaaa gcagatgctg tggcatattc acccatgtat gctccctgca ctgacacaac
47101 ataggggacc gagctcgaat ccgaatcatg gtcatacctg ttcctgggtg aaatgtatcc
47161 gctcacattc ccaacactac aaccggaaca taaagggaag cctgggtgct atgatgacta
47221 ctcatnatgg gtggctactg cnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
47281 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
47341 nagcctaaaa catatgcnat aaccctgccg gtttcgagct ctagaagcat ccccanacta
47401 cctagagttt cttttactttt taagtatgtg caatctgatg acctcttctc tctcatcaag
47461 ttcagctttg tctgaccagt acctaaggca aatgttggcc tcacaaactt ttccaaacac
47521 caagcattta ataagagtat caactctggc tcatgcaaaa gtgaatgact agtagaaata
47581 atggggacag aaacagaggt gttcttgtca tccgatcatc ccttttcctg gaaaatttga
47641 atattttcca taaaattatt atacagttat tcactttaaa gctgttctca aatgtccata
47701 gaggctcagt catgaacgga tattcattga ggcttcacac tgtctgggca tgtcaggaac
47761 catccatgta ataaatagac atgagcacac atctatgaaa acttagctgg ttactcaaga
47821 cagtgtgtcc aagcataacc tggaaattcg tcccatgagg actcagaagc aggaaagaaa
47881 atgtcactgt taactgatgt gcatagaaaa ggcttcattg atggaagaag aatagaactc
47941 aggcagagaa gaggaaagaa gggcctctgg gtgggaaggc acccagagca aaggcaccca
48001 ggtgggaatg cgtatgcata ctangatgca gaattctctc catttaccta agggtcaagg
48061 aggtgggagc aatgtaagaa ccgaaaaatg tnttcagatg tagaattagc atatataaag
48121 gaataaagat tttgtctgtt tataaaaatt tgctgaaggt atctaaaata agcacattta
48181 agnaagatct acgattactc tttagagaga aaatatattg gagaaaaatc tctccctatg
48241 gagaactgaa tctcctggtc ctgcggtggt tttatctatg ttttgaacaa gcaccttatt
48301 cttggttgnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
48361 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnngc ctagacttgc
48421 atgcctgcag tttgactcta gaggatcccc gtttagtgaa aatcatttct ggggaaatat
48481 atttgcttcc atattttttc ctgcagcttt caatcttgct ggtaagtaca cttctactta
48541 gatgctcttt gctttgtgac agagaaactc atatttctga tttttttcttt aactgaggtt
48601 tttcattcct gtgatctcag gcctgccgtg agccaaggga ctttggctgg ggctggggat
48661 gggatgagag ggtgggaagg ttaagagctg gatctgccgt ttgctgagtg tgtgaccttc
48721 accgatttac ttagtgaatc cagaaagaag cttttttattg gaagtagcca aaacaaacaa
48781 acaaacaaac aaaacaaaac agaaaaaccc agcctgaaag ccttaaacaa gaagaacaat
48841 gtattttctc atatattatg aaggctgagg tagaatttca ttagagttgg ttgattcaat
48901 ggcccgataa gggagaactc aggttcttgc catctttcta ctctgccatc ttcaacatac
48961 cagtagtatc tttagctact cttcttggta ccctgagtca cgtctggaca caacatctga
49021 tggaagaaac aggaactttt cttcccatat gtctctgtat tatctagtaa tcctttacaa
49081 aagcctgccc ccttgcacta gcagacctca tctcatgaat tattgaacaa aactaggtca
49141 cttgttccta cctaagccaa ccccagctat tgaaagtggg ttctgtgatg ggcctccta
49201 attggatgcc tgccanagct gnctgggga gggtggacct ttgaaaaaaa ttgagatggg
49261 tcatgaagga ggagcggttg gggtagaaaa cgctnatgtc tgctacactg agttggctag
49321 acctatgttc ctatctgcac ctggataaaa atattctggc ttaggccctg ggctactctt
49381 attaagttgc annnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
49441 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn ngctttaact
```

```
49501 tgcatgcctg cgtgttgact ctagaggatc ccctcgtcca attacatagt acgttacata
49561 tcactatcat atgcatggtc tcattctgac catgcatacc cttatcaaag ataccttat
49621 cagttaagcc aagcaagtgt tgacttgcct tagatcaagc ccaagtgtat taatgcaaac
49681 tcagatattc agagttgagt aggttgttct tatgattttg ccaaagtgcc tcttaaagga
49741 taagaacagg gattcccggc tgggtgcagt ggctcacgtc tgtaatctca cactttggg
49801 aggccgagcg gggcagatca cgaggtcagg agttcaagac cagcctggcc aacatggtga
49861 aaacccatct ctactaaaaa tacaaaaatt agctgggcat ggtggtgtgt gcctataatc
49921 ccagctactc gggaggctga ggcaggagaa ttgcttgaac caggaacccg gaggtggagg
49981 ttgcagtgag ctgagatcgc accactgcac tctggcctgg gctacagagt gagactccat
50041 ttcagaaaac aaaacaaaac taaacaacaa caaccngaac cccagcgaat tcaccctgtg
50101 agggcccanc gggggtctgg gaatctggtt gttaacagca ctggtggtga ttccatcgca
50161 aggcaaggc taaaacgcaa ctctacactg gggctgggat gggggagggg ggaccctggc
50221 attcagaata cctggggagg tttttcaaaag gacatggtgc tggatcaagg ataaagggca
50281 tgggtggagg ggacttgggg aaggcctggt ttgggcactt ctggacgtga gaccaccata
50341 ggagtttctg ggagcgcagc ggtgctttgg gccccgtgag ggggacccga cccccgagca
50401 cccaggaggg gggtnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
50461 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnngcctan
50521 atacgttgca taaccctgca ggcttcgact gctagaagca tcccccattt gtgtaccatt
50581 atttctgtga atgtaagttt ttatttctcc agcaaagata cttaaaagtg ggatttgtag
50641 gttataagta tgtgtttaac ttcggaagga actgctaaat tattttccag agcagctctt
50701 accactttac attcccacca ggaatgtatg aaagttccag ttgctccata tcttcaccag
50761 cacctggtat tgccaagctt tgttctcttt gggttttttg gtttgtttgt ttgtttttct
50821 tattttagcc atcttcatag gtgtgtattg gtatttcatt gtggtttaa tttgcatttc
50881 tctaatgaca gatgttattg agtacctctt catgtgctta tttaccatcc atatatcttc
50941 tttgacgaaa tgtctattct gatcttttgc taatttttaa aattggttta ttttcttatt
51001 gttccgttct gaaagatttt attattttat tttattctat tttattttat tttatctatt
51061 ttttgagatg gagtctcgct ctgttgccca ggctggagtg cagtggcatg atctcggctc
51121 actgcaagct ctgcctcccc gggtcacacc attctcctgc ctcagcctcc caagtagctg
51181 agactacagg gnccgccaac atgcctgggt aatnttttgg tttattagta gacaccgggt
51241 ttcatcatgt tagccaggat ggtctcgatc tcctggacct gggatccacc tgccttgggc
51301 ctccaagacg ctgggattac aagtggtgag ccaccgcacc cagcaggtct ggaggatttt
51361 atttacaatt aacaaggtta ggtatacttg gtggaccagt ggatgggaaa atttcctcca
51421 gcctaggctg gccttttatt ccttaaaaac acgggttcgg tgaaaaaggt aagaccggga
51481 atnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
51541 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnncctagat cttgcatgcc
51601 ctgcagtttc gactctagag gatccctgt actaagaaaa attcttctgc cttgagatgc
51661 tgttaatctg taaccctacc cccatccctg tgctcacaga aacatgtgct gtgtcgactc
51721 aaggtttaat ggatttaggg ctatgcagga tgtgctttgt taaacaaatg cttgaaggca
51781 gcatgcttgt taaaagtcat caccactccc taatctcaag tacccaggga cacaaaacac
51841 tgtggaaggc cacagggacc tctgcctagg aaagccagga attgtccaag gtttctcccc
51901 atgtgatagt ctgaaatatg gcctcatggc aagagaaaga cctgaccgtc caccagcccg
51961 acacatgtaa agggtctgtg ctgaggagga ttagtaaaac aggaaggcct cttttgcagtt
52021 gagataagag gaaggcatct gtctcctgct cctccctggg caatggaatg tcttggtgta
52081 aaacccagtt gtatattcca tctactgaga taggagaaaa ccgccttagg gctggagatg
52141 agacacgctg gcggcaatac tgctctttaa gcattgagat gtttatgtat gtgcacatca
52201 gaagcacagc cctttttct taaccttgtt tatgatacaa agacatttgg tcacatgttt
52261 tcctgctgac cctttcccac tataacccta tggcgcgccc acatccctc tctgagatgg
52321 gggaaatatg atcataaata ctgagggaac taaaagacgg gagcggggcg cgtcctcctt
52381 acctgacgcc cgtcccgggg gccactttgt tctggatact taggctggac cgttttgtg
52441 aagntctcgg ccacggcaga acgttccgtg tgggggaggg ccccttccga gattaaaccg
52501 ctgtaacggg aaaccccttt ctaaacnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
52561 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
52621 nnnnnnagct aaacttgcat gactgcggct cgactctagg gatcccccgg ctaccaaggc
52681 gaagaatctt tatttaacaa agcgtactac ggcggcggga cgaacttctt ccgaaaagaa
52741 agccagaagc ttcagcagag cgctaaaaaa cgcgatgctg agttagcgaa cggcgccctc
52801 ggtatcatag agttaaataa tgattacaca ttgaaaaaag taatgaagcc gctgatcact
52861 tcaaacacgg taactgatga aatcgagcgc gcgaatgttt tcaaaatgaa cggcaaatgg
52921 tacttgttca ctgattcacg cggttcaaaa atgacgatcg atggtattaa ctcaaacgat
52981 atttacatgc ttggttatgt atcaaactct ttaaccggcc cttacaagcc gctgaacaaa
53041 acagggcttg tgctgcaaat gggtcttgat ccaaacgatg tgacattcac ttactctcac
```

```
53101 ttcgcagtgc cgcaagccaa aggcaacaat gtggttatca caagctacat gacaaacaga
53161 ggcttcttcg aggataaaaa ggcaacattt gcgccaagct tcttaatgaa catcaaaggc
53221 aataaaacat gcgttgtcaa aaacagcatc ctggagcaag gacagctgac agtcaactaa
53281 taacagccaa aaagaaatgc cgatacttga ttgggatgtt cttttatgtc tcaacaagat
53341 ggtgaatgga cttaggggta gatccacagg cggggggggg tcgcctggac ccgtattcca
53401 tagtggctcc aagtagcgaa gcgagcaagg actgcggggg ggccaagcgg tcgggcaggg
53461 gtccagaacg ggggcgctag aaatgcgtca acgatttagc gctgcagccg ccttaggacc
53521 tgcgagtgct tgggaagagc aatatccgga agagacgcgg cgggcacggg taaccaacct
53581 atgcctcaac tccaggatag cggtgcggag nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
53641 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
53701 nnnnnnnnnn agctaagaat gaatacctgc gtttcgactc tanaggatcc ccttttttcac
53761 ggaagcttct gaagatgggt tgttatttac ctactcaggc catgtgttct atgcagcaac
53821 aagtggacct ttctccaaga gagttcagaa atctctaacc ctgtaaacaa ggtcacacaa
53881 aaacaacagt tgattaaaaa aaaaaagaat tctttcagcc ttggcatctt gctctttggt
53941 tgtgggccca tcgactttac ccttagacca ctcctgggat cttcaattca ccacagtaaa
54001 tcagcacaca gtctgctatt ttaaaaaact gtaagaggtg cacctgaaat tcacccagat
54061 tgacactttt atccatctga tcacttaata ttatttttaa aatggcatcc tagagttctg
54121 gccacaactg ggccggccca gcagggacca ctgaatatac agtggagttg agataggttg
54181 gttggtttca ggtggccaca gcaggaacca atttaaggat ggatcctgga agtgtttcat
54241 cttagaatag cagtcccttt agaattagaa ggaatcttag tgaatatata acccagcacc
54301 ttcactgttt atatgtgaag actgaaacat aaagggatta gcagtggtac agtggagtaa
54361 atcccatggc cactggagct gattggcact canatcccag tgctgctgct tactgtgtgc
54421 tccacctggg atatatttat cccttgcctg tctttacctt gaaagtaaga tgattatact
54481 acanagaatt gttgaaaact ggtgggtgtg ggttatagga ccggtgtaaa gatgattacc
54541 accatcctca ggagacggtt ttaaagattg atgaaggaat gcgtaccaag gaccgggcac
54601 acgccgggcc cacaaacacc tagaagggct cgggttctat aaagactact agggacatgg
54661 tgactgctcc aggaagnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
54721 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnagtt
54781 taacttgcat gcctgcggtt tggctctagn agcatcccca gnaagtaggt attattctct
54841 gcattttatg gataanaaat gtaggcagtg ggagctcgcc caagacactg gctggttggt
54901 atggagcagg gattctaaca gtggcagtct ggccccagca tcagtgctct tatgactcaa
54961 cacaccacct gtctgggact gctcttgctg gggtccaagc ctgctgtcct ggcacctgag
55021 atgagatggg tcttacatca cttactcana gatccgagga caggagggag tctgaacttg
55081 gctgatgggg gtgtagaatg actcctgggc catggtaaca caaaatgaga gctcggggga
55141 agcacaacag agggctgcaa atcatctagg aattgacata gatgctggac aagtatctcg
55201 caggtcacct ccataccaca gaacagcaag gaagtcccag gctggcaatg agacacctgg
55261 tttctggttc aggctgtatc actgagccac tgtatggtgg tcttggcaag ccaggaaggg
55321 cctcaggttc tttgttctca caacatatga gagacagcca gagccagagt gagggcaaga
55381 atgcaggaga gggccttgat ctgtctatgt gtgtccagct ttgacgatca atggatctca
55441 gagacttcac agtcaagtgg gagtgggcca catanatcat cacatatcag tcacagccct
55501 gacagagaag acatgggaat aaaagggtgg caactggaga aagtctaggg aaagacattt
55561 aaactggaac cacaaggctg gataggtga ttcacgcctg taatccaaca cttcggcggg
55621 tgaggtcgtt tgagtcaaga gtcaagacag cctggcaatt aggaaacccc ttctctaaaa
55681 cactaaaatt attgggcgga tgtgcaccct gtagcgaact cctgaaactn nnnnnnnnnn
55741 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
55801 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnc cttgacttgc atacccctgca ttcgactcta
55861 aaggatcccc ttgttgatgg gaggcttttc tcaactcttt aagtatttca ctccagtctc
55921 ttcttgcttg tctggtttct gagaaatcag aggtaatcct tctctttgct cctctatagg
55981 taaggtgttc ttttcctctg gcttccttct ggactttttc tttatctttg gttttctgta
56041 attggaaaat aatatgccta ggcataggogt ttttgtttg ttttgttgtt ttttttgtt
56101 gttttggca tttatcgtgc ttggtgttct ctgagctttt gtgtctaaca attttttttgg
56161 taaaattctc agttgttatt attgtttcaa atatttatcc tgttcctttt tctcttctcc
56221 ttctggtatt cctattgcct gtatgttaca cctttgtag ttctctcaca gtctgtgaat
56281 attctgttct gttttttttca gactttgttc tttttgtttt ccagttttgg aggtttacat
56341 tgagatcttc tcaagcgcag agactcttcc ctcagctgtg tccaatctac tgataagctc
56401 atcaaaggca ttcttcattt ccattacagt gtttttttatc tccagcattt attattagtt
56461 ctctcttaag atctccatct tcctgcttac atcgcccatc tgttctgaca tgttgtccac
56521 tntatccatt tacagccctg agcacattaa tcatagttgc tgtaaattat gtatctgata
56581 attccatatc cctgccatgt ctggaactga tgcttgctct gtaaaaattg gggtatacac
56641 cctttggcat ggcttatatt tntttctcga tagcagacat gaggtagtgg gaagaaggac
```

```
56701 tcctggaaat acgcttaata tgtatggcgg aagatggggg aagaaaaagc caaatcggct
56761 agattgggcc cgtgcttaag gnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
56821 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
56881 nggctagaat tgcatacctg cggttcgact ctagaggatc ccctgacttg ggatctgatt
56941 ttagattgct gataagacaa aatgtatgtt ctaactgttg ggtgcatagt agggttgctt
57001 tggaacagtg tcttgtgttg atgagtaatt ctgcgccttg aacctgtgcc accacaattt
57061 cagttaaagg cttacaagtc ctatcagctt ctcagaacat tttttttttt ttcaaaacca
57121 cttttgtgtt ttctgaacca gaaatctgct ttagtgctta gcaggtttca tgtttcagaa
57181 ctgtactttt agagtgtctc tagacaacac tgaaaggcac acagagagaa atgttgatgt
57241 ggctgggtgc ttggtttgtt ccccgtcttg gttggcggtt cggggcgggg tggtggaggg
57301 ggagggttaa aaattatagc aggtgtctgc tggctgagag gtcagtaaac aattccagat
57361 gctttgaagg atctagaatt tccagcagct tggctctggt tgacatttaa aaattaacat
57421 acttaatcct ctaatcatat atgatcaccc ccaacaaaag tgatagaggg tctcccttag
57481 ataaaaaatt ggaattaata tgtactttaa aagtagatct agttttaaaa actagatggt
57541 gttacaagta cagtaatgaa agccattntc tttcatttgt atttgaaaac aatctttaca
57601 tcagaaagct antaaactat ncattgcctn tgttttggaa ttcctaaact gagtagatag
57661 acggtgagca tcacgatagc ccaagactgt gactgaaggc cagaatactc tggagttgga
57721 ttttagggcc ctaggaaggg ncgctaatac nacactcttt aaaactctac tgtcctcctg
57781 gataattata aaatatatgg gctgacttct taaaaagaac tttgatatgg aggtttctaa
57841 gtaaatanca cagaaaaaat gagnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
57901 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
57961 nnnngccttg atcttgcata ccctgcagtt ttcgactcta gnaggatccc caaacctaaa
58021 accccttaat gaaggggagg ctggagccct tgaggaaagg ccctggtacc ctactaaatg
58081 tttatactgt taatctttct ctcagttttc cccaaaagag atgtatggcc tttttactag
58141 ggtaactgtg cattgagaaa agagaaataa tcagacctct cagggcttac tggacattgg
58201 ctctgagctg acactaattt caggagactc aaaatatcac tgtggcctgc cagtcagagg
58261 agggactttt gaaggtcatg cggtcaatgg gatttcagct cagatccatc tcacagtggg
58321 tctaatgggc cccaatgcca tcctgtggtc atttccccag ttctggatgc acaattagaa
58381 tagacatact tagcagctca cagaatctct acattggttc cctgaatcgt ggagtaaggg
58441 ctattatggt gggaaaggcc aagtggaagc cactanaact gtgtctacct aggaaaatac
58501 taagccaaaa gcaatacgac atttctgggg gaactggaga ggtcataaag gacctgaagg
58561 gatcgggggg tggtgattcc cccaccaggt ggttgaactg tgcgtttgct ttccaacttg
58621 gcagacacag ggggatcctt caaaatagca gtgggtgttg ggagccgtag cagggggaa
58681 cttcaagtgc acctggtgtg agatttggtt tttttctttt gacaaaaaa aaccgttttt
58741 tcccaaggcg cgcggaccgg cggggcggtg cgtgttcgcg ccaaccctgc ntaagacccc
58801 ctcggcctct ttcgggggca acgacgaggt tggtaaccta tcaaaaaccc acggatcgga
58861 acgggtcttg caggtaggag aaaccgcacg agnnnnnnnn nnnnnnnnnn nnnnnnnnnn
58921 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
58981 nnnnnnnnnn nngcttagaa ttagcatgcc tgcggtttcg actctagagg atccccttgt
59041 taataaccag tatctattgt cttgtatttg taataaaaat atgatatact aaattcaaac
59101 aaagttctat attctaggca caaccagatt tttggataag tcaaatagcc atatagtaga
59161 tgcttgttga atctaataat aaacaccagc ttcctttgcc cttggatagg atgattctga
59221 ggcatggtgt tttactccgt ttgccatttc cctttcagga ttaaactcct tcagggttaa
59281 actccactgc cacctgtgag aataggtcta ataacgttct ttttatgggc tgctgttccc
59341 tccctgtatt actttcccac gttcctactg atatttcctg cacttctcaa taagttactt
59401 gcattggaat cattgtctca gggtctgctt ttacggaaac ccaaattaaa atatttctcc
59461 acaagagggt acatttcata agggcagggt ctttgtctac tctttctttg tctgctttgt
59521 ccactccatg tccttacagc ctagcacaga gagggcaca aaggaggtgc tcagtacatt
59581 tcagtgcatg agtgaaactt cactgaagaa ctttccttgc tcaagctgac aacctgctca
59641 ctgacattgt aacattggaa cccaattaac catccttcat ggggtaagaa ctttctgaca
59701 agaactnctg tagtccttga aattntctag tctaaacaag aaccatgtac tnganngatg
59761 gnntctaggt ttctggactg ggctctcaaa tctgattaaa ttaaggatnn ctatagcttt
59821 attnctagga gtaaagagag cattgatagt ccctgggtgt gaagtggtaa tagaggaatg
59881 canaaaagct gactgaatat tcctaatgat cactggnaca cacanngcan ggagtnggtg
59941 acttgggana agataccctn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
60001 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
60061 agctgaatgt aaaaaacctg cggctcggct ctgnaggatc cccccacac acacgtagag
60121 agaggaacta taagaaaatg tgtaaaatgt gaaggcaagt gggagttcat tgcatttgcc
60181 taacagcttt tccaaaaatg tttgacatgt ttccagataa aataggtaa gagagaaag
60241 ggaattatta tagactaaaa atacttaaca aacatatcaa acaaatgtaa tatgtgggcc
```

```
60301 atatgtgaat cctaattgca ataaaccaac tattaaaaac caatattttt gaggcaatct
60361 gagaaaactg aacatgcatt aggtattaga taaatattag gaattaacaa gttgttaatt
60421 ctgttgagtg tgataatggt acattgtggt tatggaaaga aggctttatc tgttaaagat
60481 gcataccgaa gtattggcaa gtaaaacaat atgtcatctg ggatttgcac atgattcaga
60541 aaagaaatgt tttaaaatga gagaaatgaa acaggaatga cagaatgttc actgttgaag
60601 ctgggtaaca gatatattgg agttatttac actattagca tctcaacttt gtgtctgaaa
60661 attcttcata ataaaaaatt gttttaaaaa actaaaactc atgcactctg ctagagaata
60721 aaagaattct ttctgaaagt tanggataaa tcatttatat agatctgtaa attgcagcct
60781 ttatatctta cccttaagaa gctaagctgt ggntgcntgc ntgtcacata cgcatgcaca
60841 acttacactt tncaaaagta ctctgagcca ctggtggcca aggtccagtc canaagtgga
60901 tgctggatga gtaggtactt ccatttgcca ncttattagc aggtaataac cttcaattca
60961 tatctaaaat catgtatgta gaatggtctg tcctaaccct tggtcctcta acaacatata
61021 aaagaagaat nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
61081 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn gggtagatac
61141 ttgcatgccc ctgcggtgcg actctagnag gatccccacc ataaaaaccc tagaagaaaa
61201 cctaggcaat accattcagg acataggcgt gggcaaggac ttcacgtcta aaacaccaaa
61261 agcaatggca acaaaagcca aaattgacaa atgggatcta attaaactag agagcttctt
61321 ctgcacagca aaaaaaaacg ggtaccgagc tcgaattcgt aatcatggtc atagctgttt
61381 cctgtgtgaa attgttatcc gctcacaatt ccacacaaca tacgagccgg aagcataaag
61441 tgtaaagcct ggggtgccta atgagtgagc taactcacat taattgcgtt gcgctcactg
61501 cccgctttcc agtcgggaaa cctgtcgtgc cagctgcatt aatgaatcgg ccaacgcgcg
61561 gggagaggcg gtttgcgtat tgggcgccag ggtggttttt cttttcacca gtgagacggg
61621 caacagctga ttgcccttca ccgcctggcc ctgagagagt tgcagcaagc ggtccacgct
61681 ggtttgcccc agcaggcgaa aatcctgttt gatggtggtt ccgaaatcgg caaaatccct
61741 tataaatcaa aagaatagcc cgagatag gg ttgagtgttg ttccagtttg gaacaagagt
61801 ccactattaa agaacgtgga ctccaacgtc aaagggcgaa aaaccgtcta tcaggggcga
61861 tggcccacta cgtgaaccat cacccaaaat caagttttt g gggtcgaggt gccgtaagca
61921 ctaaatcgga cccctaagga gccccgatta nagcttgccg ggaaaccgcg aactggcaga
61981 aggaagaaaa aacaaggacg gcctggggcc tgagtgtacg gtaccttgcg accccacacc
62041 ccggcttatc ccntcagggc ctctaggtgc tagaannnnn nnnnnnnnnn nnnnnnnnnn
62101 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
62161 nnnnnnnnnn nnnnngccta agtcttgcat gcctgcaggt tcgactctag nagcatcccc
62221 tgtgtagaaa gatacccata acagaatatt cgggccttcc gcatgaacac ccagagaact
62281 caccctggaa tggcacaggc aggaacattc cggagccctt cacatccact tcccaaaaga
62341 tctctgtaat ctgcaaaata ggcacaaacc ctccagttag ggcaggccat ctgcttttat
62401 gccttgccac cccaaaactc gctctaaccc acccaatcca attctcacct ccgtggcagc
62461 aactgtgtga cctgaagttt catcagtgca tgccagcagg tggtcagtaa ggggcaatcc
62521 tcctgcggct ttcgtggagg gactagagtg ggcagatatg gtcccaggtt cctctgcagg
62581 cgttgccagt gataatctcc aaccagcaga aagatggtga tggacctcga tggagagaga
62641 ctgggcacat tgtgtattca cacaataggg ttcccctcac ctgncaccca aacaaggaat
62701 acgccagcag gggcaatttt ctgaaagtta tctccttcgg gagctctgtt tgtgtttact
62761 gggacatggg acagtgtttg agtggatagc ctcttgcctt tatctctctg cttttgggagg
62821 atgagaggga agagagagaa aaggagaaaa aggagatgtt ggcaggctct taacaaaatc
62881 atgccaaaaa gaatggaaag attaagatcc ctttgagctt ttttacagtg gagaaagcta
62941 tatttgactc tgtagggacc ggaagctatt ggttaaatga attggaggcc aaccctgaac
63001 ccaggaacat tcgcaaccaa cctgccggag taagtccctg attgaggatg tggaaaaaaa
63061 cctccaaaca tggcctgtgg ttccctgggc tgggagttcc cagacacaca gnnnnnnnnn
63121 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
63181 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nggcttagct tgcataacct gcagttcgac
63241 tctagnagca tccccttggt tccaagtctt tgctattgtg aatagtgctg caataaacat
63301 acgtgtgcgt gtgtctttat atcagcatga tttataatcc tttgggtata tacccagtaa
63361 tgggatggct gggtcaaatg gtatttctag ttctagatcc ttgacaaatc accacactgt
63421 cttccacaat ggttgaacta gtttacagtc ccaccaacag tgtaaaagtg ttcctgtttc
63481 tccacatcct ctccagcacc tgttgtttcc tgacttgtta atgattgcca ttctaactgg
63541 tgtgagatgg tatctcattg tggttttgat ttgcatttct ttgatggcca gtgatgatga
63601 gcatttttc atgtgtctgt tggctgcata aatgtcttct tttgagaagt gtctgttcac
63661 acccttcacc cacttttga tggggttgtt tgatttttc ttgtaaattt gtttaagttc
63721 tttgtagatt atggatatta gcccttcgtc agatgagtag attgcaaaaa ttttctccca
63781 ttctgcaagt tgcctgttca ctctgatggt agttttttt tgctgtgcag aagaagctct
63841 ctagtttaat tagatcccat ttgtcaattt tggcttttgt tgccattgct tttggtgttg
```

```
63901 tagacgtgaa gtccttggcc atgcctatgt cctgaatgga ttgccctaag tttcttctag
63961 gggtttatgg ttgtaggccg acgtgaagtg tgtaaccctc ttgaataatg ttggataagg
64021 ggtaagaagg gatccatgga agtttcatct agggtacgcg tttcccaccc tttaaagag
64081 gaatccttct ctgtttgttt gaaaatctca gaacaaaggt ggaatggggt tactcgaggc
64141 gtggcgggnn nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn
64201 nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnngc ctatatcttg
64261 catacctgca ggctcgactc tagaggatcc ccgtgtaagg aagggatcca gtgtcagcct
64321 ttctacatat ggctagccag ttttgccagc accatttaat aaagagggaa tcctttcctc
64381 atttcttgtt tttgtcagat ttctcaaaga tcagatggtt ttagatgtgt ggtattattt
64441 ctgagggctc tgttctgttc tattggtcta tatctctgtt ttggtaccag taccatgctg
64501 ttttggttac cgtagccttg tagtatagat tgaagtcagg tagcgtgatg cctctagctt
64561 tgttcttttt gcttaagatt gtcttggcaa tgtgggctct tttttggttt catatgaact
64621 ttaaagtagt tttttccaat tctgtgaaga aagtcattgg tagcttgacg gggatggcat
64681 tgaatctata aattaccttg ggcagtatgg ccatttcat atttattctt cctatccatg
64741 agcatggaat gttcttccat ttgtttgtgt cctctttat tctgttgagc agtggtttgt
64801 aattctcctt gaagaggtcc ttcacatccc ttggaaggtt gggtgcctat gtattttatt
64861 ctctttgaaa ccattgtgaa tgggaggtca ctcatgattt ggctctctgg ttggctgggg
64921 gtgggggaat aagaatgctt gtgattcctg cccattgatt ttgtatcctg ggactttgct
64981 gaagttgctt atcagcttaa ggagatttgg gctgagacga tagggttttt aatataccat
65041 ctgggatctg caacgaaaca attgcctgcg gtttcctaag gaactcttta ttattcttct
65101 cccgaggcct tggcggactt ccccttgtt tatagagggg aagagggctg cctgcctgac
65161 atttcaagga agcctccatg ttgcctnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn
65221 nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn
65281 nnnnnnagct agacttgcat gcctgcggtt tcgactctan agaatccccc gacaaccata
65341 cgctgagaga ccctcactac gttgaagaca aaggccataa gtaccttgta ttcgaagcca
65401 acacgggaac agaaaacgga taccaaggcg aagaatcttt atttaacaaa gcgtactacg
65461 gcggcggcac gaacttcttc cgtaaagaaa gccagaagct tcagcagagc gctaaaaaac
65521 gcgatgctga gttagcgaac ggcgccctcg gtatcataga gttaaataat gattacacat
65581 tgaaaaaagt aatgaagccg ctgatcactt caaacacggt aactgatgaa atcgagcgcg
65641 cgaatgtttt caaaatgaac ggcaaatggt acttgttcac tgattcacgc ggttcaaaaa
65701 tgacgatcga tggtattaac tcaaacgata tttacatgct tggttatgta tcaaactctt
65761 taaccggccc ttacaagccg ctgaacaaaa cagggcttgt gctgcaaatg ggtcttgatc
65821 caaacgatgt gacattcact tactctcact cgcagtgcc gcaagccaaa ggcaacaatg
65881 tggttatcac aagctacatg acaaacagag gcttcttcga ggataanana gcaacatttg
65941 cgccaagctt cttatgaaca tcanagggca tanaacatgc gttggcanaa acagcatcct
66001 ggagcaagga cagctgacag tcaactaata acagcaaaaa gaaaatgccg atacttcatt
66061 gggcatttc ttttatttct caacaagatg gtgaattgac tagtgggtag atccacagac
66121 gggtggtggc gccattgatc ccgtatccaa tagtgcttcc attagcgagc caccagaact
66181 gggcggcggc aaaccggcgg aagggctcga gaagggtgcc ctagaattgc atcaaccata
66241 tacgctacaa cagcattnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn
66301 nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnggc
66361 tttgaacttg catgcccctg cgtttgactc tagaggatcc ccanaatgct ttcttcagaa
66421 gacagctgga ttctcatatc tgtttctgca ctagtctgtt tgatatcaca tatcatgtag
66481 cctctggaga gcactaatgc acacttgaga ggacgagatg aaaaaggcga ttgatgcctc
66541 agtgttatca tgaaaactag ttttgacctg aaagaggctt aaagtttcca aaccacactt
66601 taagaatacc cggtcaagaa ttttctggtg aaacttattt atttactgtt cttttaaaaa
66661 caagggtt ttaatatcca tgaaaagata actattgatt cttatttggc agtagagaaa
66721 gtcttaatgg ttaaaaaatt tgtagtttag tgaaaatcat ttctgggaa atatatttgc
66781 ttccatattt tttcctgcag ctttcaatct tgctggtaag tacacttcta cttagatgct
66841 ctttgctttg tgacagagaa actcatattt ctgattttt ctttaactga ggttttcat
66901 tcctgtgatc tcaggcctgc cgtgagccaa gggactttgg ctgggctgg ggatgggatg
66961 agaggtgggg gaaagttaaa gagctggatc tgccgtttgc tgagtgtgtg accttcaccg
67021 atttacttag tgaatccaga aagaagcttt ttattggaag tngcccaaac anacaaccaa
67081 ccaaccaaac aaaacagaaa acccagcctg aaagcctaaa caagaagaac atgtatttc
67141 tcatatatta tgaaggtgag gtagaattct ttagaagtgg tggatcntgg gcccataagg
67201 gaaactcagg tcttgcatnt tttactctgc ctggtaacat accagagtat cttagctctc
67261 tgctggaccc tgagtacgtt ggaccaactc tgaggaagaa cggactnnnn nnnnnnnnn
67321 nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn
67381 nnnnnnnnn nnnnnnnnn nnnnngctt ggaacttgca tgccctgcg gttcgactct
67441 agaggatccc ctaactaaag cagaatttta tctttcagaa tcagttaagg gctttttgga
```

```
67501 cagtgtaact aactacgtca tctgcacaca gaaggatgtt tattttctt atttcaactc
67561 atccaagggt ggtggctggg ctgttaggta cagtttcaag agaggggaag ccacaactct
67621 ctgctctcct agttatagca acttaatgta gatcctcaag agtcgaggag tactgataag
67681 cataataaga aatagaaaca caagtccaca aagaggaagt acacttgggt tgattttcaa
67741 tttattattg cagtgatttc agagaatgaa cctaatcaac tgatccaatt gacattgaat
67801 gtaattttga ctgacaaggc ttagtttacc ccttangtgc aatgggttaa gaacagagac
67861 agagagcttt tcaccaaaat ccatgttccc ctttcttgga ttggaggcat tgttgggagg
67921 tagattcctg gctagaaact atattcccca gagcacctta taaccagatg tggttgtatg
67981 actagtcctt attgatggaa tatgagcaga aatgaattgt gtcatttgca ggctgaggtt
68041 ttaaagaact gagtgtggct tctctatagg gtagtccctg cttaatctgc ggtttcgctt
68101 tccattattt cagttaccca cagttcactg tgggtcaaaa acattaatga aaaatccaga
68161 agtaacattc atgtttaaat gtgccgcttc tgagtgaatg atgaatctgc gctactacct
68221 cgctctcata gtacttaaga gacactcggt aaacaacagc tgtcccggtc gcacactggg
68281 tcacatactt tatttactta catggcccaa ggcaagatat gaccgnnnnn nnnnnnnnnn
68341 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
68401 nnnnnnnnnn nnnnnnnnnn nnnngctta gactatgcag accctgcttt cgactctagg
68461 agatccccan attctactgc tctggagcac agaaggagaa gggaggaggt ggtcctttcc
68521 cttggaagaa ttggcacaag gaccccaatt ctccctttgt aaacctggaa aagagagccc
68581 cttgaaaaat tttggggttt tcattctccc tcctggagtt gctctgaatc ccatggctgt
68641 ggatccctgc ggagtggtga tataatggaa atgagtcctc aaatatctcc atttgcacta
68701 agcagttttt gtgtgccatg tggctgtaag tgtaagtact atcatgcagg aggtatgtcc
68761 attttttact taaatctgtg tccttatatt aaaagtagtt ggagtttaga cccacatgac
68821 agccaggcct gatagttggg ttccctattt catttgacac tctcttttgc cccatatgtc
68881 tccacactag gggttcagca gcctagccat gggaatggac ttcttagagg ctccttcttc
68941 ttggctgggg ccctggacc ctgatgaggg ctgcccagag ccttcccctg cagtgtcacc
69001 ttcttgtgag ctgagtctga ggaggtgctt ggcttccccc accgtgtaga gatggtggcc
69061 cgcgtggtga cagtcatttg ctttccctgc tttggntggt tgcctcgctc tgcctgctac
69121 cttcttttcc tccagctctt tcttccacat cacaatgcct tggtatgatc tcctcttccc
69181 cccccatgat gctagaaact gnctcttgtc tcaccacccc tttgtttctt ttccaagatt
69241 cctggctcct cttcgagctc tctgactcca agttaagccg ggaggatttc cttctctgca
69301 gtaccggaaa tgctctaata ccacttctgc ttcggtggcc acaaaattct cccgcaagtg
69361 gcccggatct nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
69421 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn gtttaacttg
69481 cataccctgc gtttgactct agnagnatcc ccctacctct tgagtggcag ggtttacatg
69541 cttgaagcat ctttctgcct ccctgtgatg agggatagat ttacggtttc atccacagac
69601 tatgggcctg gggcctgtat tgtcttcaaa ctctgccact ttaaactttg gtagaacttg
69661 ggttccccca aaggagacgt taagacaggc tctagccttg ggaaattagt tcgcctccca
69721 gccatccctc ctctcttccc atagaaccct agagccagtt ttcaatgcca gtctctcaga
69781 gaccctcacc tcattttctc tgccgacact tttgcagata agtctagcac tgactagaac
69841 acaggttgta gagggtacag cataacgttt ttgtgtagaa agatacccat aacagaatat
69901 tcgggccttc cgcatgaaca cccaagaact caccctggaa tggcacaggc aggaacattc
69961 cggagccctt cacatccact tcccaaaaga tctctgtaat ctgcaaaata ggcacaaacc
70021 ctccagttag ggcaggccat ctgctttat gccttgccac cccaaaactc gctctaaccc
70081 acccaatcca attctcacct ncgtggcagc aactgtgtga cctgaagttt catcagtgca
70141 tgccancagg tggtcagtaa ggggcaatcc tnctgcngct ntcgtggnag gactanagtg
70201 ggcagatatg gtcccagttc ctctgcaggc gttgccagtg ataatctcca ccagcanaaa
70261 gatggtgatg gacctcgatg gagagagact gggcacattg tgattcacac aatagggggnt
70321 ccctcacctg gcacccaaac aggaatacnc cagcaggggg catnttctga agggtatctc
70381 ctcgggactc tggttgggtt acctggcatg ggacaangtt gagtgatagc tncttgctta
70441 cccttgcttg gagatgannn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
70501 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnggt
70561 ttaacttgca tgacctgcag gtttgactct agnagcatcc ccaaanagtt taaaataatc
70621 aatttaaaat gtcacttagt aattcctgag agtggcactg atacaagaaa agcatcctca
70681 aatagcatta aatttattat tagtcacccca taattaacaa tgggtaaatt tgggaacaaa
70741 tattatcaaa tacatgttta cagaatgctg tgaatacttt gagtaaatta atattaatag
70801 tggagaatgg tattcaaggg tggctaaaca tatttagaaa agagacaaca gagattcagt
70861 aaaggattac taattanaat caaatatata atatagtcaa ggcccatgat aattttaaag
70921 tgcggtttta ttaaggaact tcaggataag tgccagtctt attttagctt cttctggaag
70981 aaatactgcc aattataaat aatcacagca aaatttccat tagacaaaaa ctatatgtgt
71041 tggnggggg ttggatcatt tatatcatcc tgcaaatata aactcaactc ttgagctgta
```

```
71101 ttaacaacac tgagcaacaa tatttctta taaaattttc tttttttttt ttttgtgaa
71161 atggagtctc actctttcac ccaggctgga atgaaagggt gcgatctcgg ctcactgcaa
71221 gcttcgcctt cccagttcaa gcagttctcc tgcctcaacc tggcaagtaa ctgggactac
71281 cggtgcgcgc caccacccca actgattttt gtgttttaag ggaaaagagt ttaacatgtt
71341 gccaaggggg gctaatttcc tggcctgaga acacctgctg ggcctccaaa gggtggataa
71401 caggaggacc ctgaccagcc taaaatttt taggagatcg gtttactaat gggggcggga
71461 gatttacaat aaatggttta ttgtaaggaa caaaaagnnn nnnnnnnnnn nnnnnnnnnn
71521 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
71581 nnnnnnnnnn nnnnnnggc taggactatg catgcctgcg gttcgactct anaggatccc
71641 ctttcgcatc ggtttagtct tgactgattt ttgcattgat tagatcttgc actgaataag
71701 ctttttactg tggttttca ggcctgaggc aggtgacagt aaaacaacct gttgaggttg
71761 tttcagtgag attgttaagc atcatatgtc caaggaaat attaatttca ccaagtcaga
71821 catatgtaag acagccatcc tttcctctgt gtatcacaca aagctaaatg gatctattat
71881 ttgaaagaaa cttgaaagaa aattttgcat atctacaagg agtgtggtat gaaggaaaaa
71941 agattaacat atccaaataa tggtcctggc tctgtcacta actaaccttg tgatcctggg
72001 caggtttaac actctgggcc ccagtttaca gacacctact gcctccagaa cagttcttcc
72061 cagtctgact tcttaaccca tcgtattcag gctttcatcc ccagcacaac ctacctgccc
72121 attgagaact gttagtgact ccaaatggtc catcccggtg gcttcttacc tggtcttgat
72181 ctccttgact tcagagagag tggcacttgg cattgtgggc catcgcctct gcagattctt
72241 cttcttcttt tttttttttt tttgagacgg agtcttgctc tgtctcccag ctggagtgca
72301 gtggcgcaat ctctcactgc aagctccgcc tcccggttta cgccattctc ctgcctagcc
72361 tnccgagtgc tgggactcgg cgcccgcacc agcccggcta attttgtat tttgtaggga
72421 caggttacc ggttaccaga cggctggttt gtgactatga tcggcgcctg actnccaaag
72481 ctggatacag cgcagcacgg ccggccaatt tttnnnnnnn nnnnnnnnnn nnnnnnnnnn
72541 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
72601 nnnnnnnnnn nnngctagac ttgcatgcct gcaggtttga ctgctaaaga atccctggt
72661 tattttcaca attgtttct tgagtattaa ttttttcacgg gtaccgagct cgaattcgta
72721 atcatggtca tagctgtttc ctgtgtgaaa ttgttatccg ctcacaattc cacacaacat
72781 acgagccgga agcataaagt gtaaagcctg gggtgcctaa tgagtgagct aactcacatt
72841 aattgcgttg cgctcactgc ccgctttcca gtcgggaaac ctgtcgtgcc agctgcatta
72901 atgaatcggc caacgcgcgg ggagaggcgg tttgcgtatt gggcgccagg gtggtttttc
72961 ttttcaccag tgagacgggc aacagctgat tgcccttcac cgcctggccc tgagagagtt
73021 gcagcaagcg gtccacgctg gtttgcccca gcaggcgaaa atcctgtttg atggtggttc
73081 cgaaatcggc aaaatccctt ataaatcaaa agaatagccc gagatagggt tgagtgttgt
73141 tccagtttgg aacaagagtc cactattaaa gaacgtggac tccaacgtca aagggcgaaa
73201 aaccgtctat cagggcgatg gcccactacg tgaaccatca cccaaatcaa gttttttggg
73261 ggtcgaggtg gccgtanagc actaaatcgg aaccctaaag ggagcccccg atttaaagct
73321 tgacgggaa agccggcgaa cgtggcgaga aaggaaggga gaaagcgaag gagcggcgct
73381 agggcgctgc agggtgaacc ggaacccctg gcgtaaccac acacccgcgg ggcttatgcg
73441 ccgctacagg ggcgtactat ggtggcttga caagcacttt aacgtgcttt cctcgtagaa
73501 tcagacggga gctaacagga gggccgttaa aggatttanc acggacgtac ccacaatctg
73561 ggaagggttt ataataagga ggcacnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
73621 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
73681 nnnnngctag acttgcatgc ctgcagttcg actctagagg atcccctatg gtaaactatg
73741 gactttgggc attgatgacc tgtcagtgta ggctatcaat tgtaacaaat gtaccactgt
73801 agtgggagat gttggtaacg ggggaggcaa tttattgtca gtgggcgggg gggcagaag
73861 atattaatat gtgacatatt tctgcaatct tcctctcaat tttattgggt acttaaaact
73921 gctctagaaa actaaagtct ttacatgaaa tgtttttttc cacagagaga aagaacccaa
73981 taagccatta accccattgg cctgagatga ataaatttat tggagtgaat tcaatgaaca
74041 cctctttagg gacctacggt tcacaaagct ctgttctggg tgttgagaca tttggatgaa
74101 taaggcacgt tgcccttagg tccacagtct agaagggaag acacaggcac ctcaccaatt
74161 ttaacaaagt tctagaagta acgtggaggg aagaatttgg aaagggagct caacaaagaa
74221 ggtgacactt agttgggctt tgagaaataa gaaagactaa gcagatcttc tgtangcaga
74281 aggaatgata cagggagtgc aagaagaaag aagcatttta cccaaatgga agagcatgac
74341 agcangggag agaagaagaa tctttatgat gtattgtgag gattactact attccagtgt
74401 gattagagcc aagattacgt gagcttgana agaaagtcan gggtggggaa ccaagaccaa
74461 cagtgaccgt aattgttttg ggataataat agctatngta gtacatggtc ttgtgaattg
74521 gtggagaact ctgtagaata gattggaagg ccaagtgtgt gctcatgcct gtatcccgaa
74581 ctggggaggc tggtgggagg atctcttgnt ccangagtac agaccactag gcacatgtga
74641 gacttggctc tctcnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
```

```
74701 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnngctaga
74761 cttgcatacc tgcggctcga ctctagagga tccccagtgg cagggtttac atgcttgaag
74821 catctttctg cctccctctg atgagggata gatttacggt tacatccaca gactatgggc
74881 ctggggcctg tattgtcttc aaactctgcc actttaaact ttggtagaac ttgggttccc
74941 ccaaaggaga cgttaagaca ggctctagcc ttgggaaatt agttcgcctc ccagccatcc
75001 ctgctctctt cccatagaac cctagagcca gttttcaatg ccagtctctc agagaccctc
75061 acctcatttt ctctgccgac acttttgcag ataagtctag cactgactag aacacaggtt
75121 gtagagggta cagcataacg tttttgtgta gaaagatacc cataacagag tattcgggcc
75181 ttccgcatga acacccaaaa actcaccctg gaatggcaca ggcaggaaca ttccggagcc
75241 cttcacatcc acttgccaaa agatctctgt aatctggaaa ataggcacaa accctccagt
75301 gagggcaggg ccatgtggtt tgatgccctg gcaccccgaa actgggtgta acgcgcgcaa
75361 tgcaattctc acctccggtg gcagcacctg tgtgaccctg aagttcctca atggctgccc
75421 acagggggtc aattgagggg ccatcctcct gcagcgttcg gtggaggact aaagtgtggc
75481 aaatatgggc ccacggctcc ctctgcgggc gttggcccgg ggtggtgcgc acaccaggta
75541 aaaanatggg gcgtggcacc cgtggggacg gagagctggc caccttgggt ttgtcacgca
75601 ataagggtgt cccgcatccg ggaagccgac catggaatac cgccgcggcg ggcatgtttt
75661 ctgagaggtt tcctgcttag gacgcgcggg cgtctgtgcg ggcgagggga aggagtcaga
75721 agagaggtcg tgctnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
75781 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnggcctg
75841 nnagtcttgc aatgacccct gcaggtttcg agctctagaa gcatccccgt acattgccct
75901 ttcctaaaca caagtgacca gtttctcctt tgctgtattg ggaggacttt ccaccaagtg
75961 ccatctattt ctcatccatc tcctttgaaa tattttcact ctttatctac ttctcctctg
76021 ggctggtaga tatttctaag tcattgtata gtgcatggat tttattttca ttttcgtttg
76081 atcagaaaat gagtcgagaa gatatgacat tgttgcatat gtggttgatt ttcatttctc
76141 ttttctcat ccttttggtg acaaacacca ggagctgctt ctttttgtat aagaagtcct
76201 tcagcaccta tactggtcat catctgaagc gcatgctctc ttgcggtccc tttgatagag
76261 caagagcacc acccacagca acaaaacatg ccctgagtct ctggagggag cctggacagt
76321 taatgaaacc cagggccaat ggaccacaaa gcccagtccg taatcagagt gctgcatcaa
76381 ttgcgcacac tcaagtgtct gattccatcg gttcagtttg gtatctgtat ggcgtctgtc
76441 tatttgtatg ataccttggt aatctgactc atgaattaga ccagaccaaa gcaacctggg
76501 ggaaaggcgg agtatttgtg ggtaaggaaa catgccttcc accttgttct aaaaccaaca
76561 ttagtagtac attcagtatt cctaaaggat aattttttcca gtaccctgtt aaataaattt
76621 gatttggccc aggctactgc ttaaacatac ccggggggac ctcccttctg acaggaaagc
76681 tgctcttact ttttggttac ttcaatcaaa tttggttcta tctaagaccg ctcgctttgt
76741 ctcaggcaca aggctcaaaa acnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
76801 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
76861 nnctttaaat tgcatgcatg cagttcgact ctagaggatc ccctgtcctt tgcacaacat
76921 ggatggagct ggaggccata atcctaagtg agtgaatgca ggaacagaaa accaaatgct
76981 gcatgttctc acttaaaagt gggagctaaa tattgaacat acatagacat aaacatggga
77041 acaacagaca ctgcagacta ctagatggga gagggtggga gggaatgagg tgaaaaacta
77101 cctattgggt actatgctca tgacctgggt gcagtccatt tatgtaataa acctgcatat
77161 gtacccctgt atctaaaata aaagttgaaa tttttaaaaa atctttataa atctagataa
77221 gaaactgtta acttttcacc atttaacaaa agtaaatgtc ttacaagaaa aatgtttttaa
77281 agggataatc tattgtctag aagaaagatg acaaaattat atttaaaaag agaaagaaag
77341 ggccgggtgt ggtggctgca cgcctgtatc ctagcacttt tggacacaga ggcaggagga
77401 tcacttaagg ccangagctc gagacaagcc tggccaacat ggctntctac taaaaataca
77461 aaaactcaac aggcgtggcg ggtggcaccc tgtggtccca gctactaggg aggctgaggc
77521 aggagactca cttgaacncc ggagggcggg gttgcagtga gccgagatat gccactgact
77581 ccaacctggg aacagagaga gattctggct gtgggaagaa aaaagaatgg cggatgaatg
77641 aatgaaagaa atcgggatga aaaggcgacc tggaagccag acaaacatta ggaaatgcgt
77701 taacattatc ctgtgaatga caaggtttgg ctttggaaga ggcgggattc accagagtag
77761 ggggannnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
77821 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnngctag acttgcatga
77881 ctgcagtttg actctagagg atcccttct ttttaatcac tgaaaagtt ctgactgata
77941 aaacgtttta aaaagaact tggagtttta gctggaaaat tagctctata gaaataaaca
78001 gcgttgtaat aaattagtag gaagtctggc tgaattacca aatctagtag ccatattgag
78061 ggcagtgata ggccttttcc attcttaact ggtcagtgtc atattgaggt ctatggtctc
78121 aattaaacag gggtatagtg ctggagaac attcagaggt gagtgactgg aggtatgaat
78181 ggactttaat catgtcacgt gaagaatggt tgaaggagat aaatgtgtct actctgaaga
78241 ttattccagg ggtcatgata gtagccttca gatagttaaa gagttttttt aattaaaaaa
```

```
78301 attgtgcagg aggctgaggc aggagaatgg tgtgaatccg ggaggcggag cttgcagtga
78361 gccaacatcg cgccactgca ctccagcctg ggcaacagag cgagactctg tctcaaaaaa
78421 gaaaaaaaag aatgtgggaa aagatacata aaatttgaaa tgttaccatt taagtgtact
78481 tacagttcaa ttgcattatg tccattcaca ctggttgggt aaccatcacc taaactcatc
78541 tttgcatctt ccaaatctct ggcctcatta aactgtaact tcccattctt gcccttccca
78601 gtccctgaga accaccattc tgctttctgg ctatgaattt ggctactaaa ggcccctcag
78661 gttggtggaa taataaccgg tgcgcttcgn ggactggctt atttcactta accaaaggtc
78721 ctcaaggtca tccctggtgg aaagagggga aaattatctc ccttgtaaga tcactatatt
78781 taatgggagg gagccaacac gtgtgggttt tcttacctgg cagggaacac tgcgaggtca
78841 caatttgggn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
78901 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnng gttggacttg
78961 catgccctgc ggttcgactc tagaggatcc ccttaagcag atctaacaag actctaagct
79021 actcttggac agctctgctt aggggctgag ccaccttccc tcaagaactt tgttgaagag
79081 tgttgaacga cctttttgga agccttctac ttgcaacatg aattaaacag cagttacgat
79141 cactgggatt aataatgtga tgtctggagc aggtaatccg gaattattaa tattatctct
79201 ctgtcatctt tttcttttct ttttggaggg gaggggggaca ggatgtcact ctgtcaccca
79261 ggctagggtg cagtgatgtg atcatatctc actgtaacct tgaacttctg ggctcaagtg
79321 atccttctgc ctcagcctcc aaagtagctg ggactatagg catgtgccac cacacccagc
79381 tacttttaa acttttgta gaaatggagt ctcgctctgc tgcccaggct ggtctcaaac
79441 tcctgggttc aagtgagcct cccaccttgg cctcccagag cactgggatt acaggcatga
79501 gccagtgtcc agtcttgtca ttgttttgct ttttctttct tttttttctt cagagagggg
79561 ggtctcactt tgttgccagg ctggactctc aaacttctgg gctcaagtga tcctcccacc
79621 tcagcctcct gagtagctgt gaccactggc acgcgccact acaccaacct ctctggcatc
79681 ttacacgaga gagcatgtct taggctgaat gcagtgggtc atggcctgta tcccaacact
79741 ttgggaagcc gaggcaggca gatacctgga gtcgggaggt tggaccgcct ggacaaacgg
79801 gaaaacccctt tctactaaag tacaaaatta gccggggtgg agggccctgg ttggaatccg
79861 actctgggga aggtgaggca ggaaaatcat ggaattggnn nnnnnnnnn nnnnnnnnnn
79921 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
79981 nnnnnnnnnn nnnnnnnnngc tagacttgca tgccctgcgt ttgactctan aggatccccc
80041 cagtgtactt cctctttgtg gacttgtgtt tctatttctt attatgctta tcagtactcc
80101 tcgactcttg aggatctaca ttaagttgct ataactagga gagcagagag ttgtggcttc
80161 ccctctcttg aaactgtacc taacagccca gccaccaccc ttggatgagt tgaaataaga
80221 aaaataaaca tccttctgtg tgcagatgac gtagttagtt atattgtcca aaaagccctt
80281 aactgattct gaaagataaa attctgcttt agttatggca atgctagctg ctttaactaa
80341 taatcccaaa aagttaagat tgactattcc aaaaccaaaa ttgttatttc tggtaaatgc
80401 tctccaaaga ttaattgggt taagtcctaa caaccataca gcaaatcaaa tagagtcaca
80461 cgctgcataa tgacatttca gttaatggca gactgcatgt gtaatgatgg tcccataaga
80521 tgattatatc atatttttac tgtacctttt ctatgtttag atacataaat acttaccact
80581 gtgttacaat tgcctacagt gtctagtaca gtcacatgct gtgcatattt gtagcctaga
80641 agcaataggc tctaccatat agcataggt gtgtagtacgc tctacatcta ggtttgtgta
80701 tacactctat gatgtccaca catggatgaa tcgccaaacg acacatttct cagaaagtat
80761 tccatcatta aatgatgcat gactggtagt ttggttacct acagaatatn ggnaaactag
80821 tcaccctaaa ggattcctat ggaataccat ggtaaaatac tatttataag tgttggagaa
80881 atttagtcat ggcagagttg gatctctgct taatggttaa aggngaacga attattgtat
80941 ggcctatntg cannnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
81001 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnggctagga
81061 tcttgcaaac ctngccgttc gacgtctagn agaatccccc ccccaccgtg tagagatggt
81121 ggcccgcgtg gtgacagtca tttgctttcc ctgctttggt tggttgcctc gctctgcctg
81181 ctccttctt ttcctccagc tctttcttcc ccatcacaat gccttgttat gatctcctct
81241 tcccctcccc atgatgctag aaactgcctc ttgtctcacc accccttct tcttttccca
81301 agattcctgc ctcctcttcg agctctctca ctccaagttt aagccgtgag aatttccttc
81361 tctgcagtac cgaaagatgc tcttaatacc agctcctgct ccagtgggcc caaaaaattc
81421 ctccaggcaa gtgggcacag agatcatctt gagaactgaa taagtttaaa gggggagaaa
81481 gtggcattaa ttgagcccta actctttgct agggaacttg catgcaatat acatctaatc
81541 ttcacagcat tcttttgaga tcctttacta ccgctttgta gatgagaaaa ttgaggctca
81601 aagaaggtaa gtgcctaacc tgaggcctca gttagtgaat ggcagtcatc atcttttccc
81661 agtctgtctg actctggagt cattctcatt tctacacttc cgcccctcgc tgaatccaca
81721 gtaatcttca cattcacctc tggctaatgc aattccatct tgattcttaa gaaatatgat
81781 gtgtcaggtt gaattctaaa cacagcatct ggattaatcc ctttcctgct gcctggtaag
81841 aatatgagaa actggaacca aaagggttta attggactac agttcacatg gctggggagc
```

```
81901 cctcagatct ggccggagaa ggaagcactt cttactgtgg tggcaggaaa aatagaagga
81961 gcaaagcgag gtctgataac cgtcgactat gagactannn nnnnnnnnnn nnnnnnnnnn
82021 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
82081 nnnnnnnnnn nnnnnnnngc tttatattgc atgacctgcg gttcgactct agaggatccc
82141 ctttttttatt aaaacatgct gcatataatt aatcactcat aaatatacat gtggtgagat
82201 gtctgtaaaa gacacacata taaaacaagg tcatgtattg tttggtttat gaaatgttgt
82261 gaccagaggc tggaaggagc ctggctcttc ccaggagcag tgattcagtg ttcactaatt
82321 cattgtctgc agagacttta tagactagac cataactagg ctgaataaca agaattgact
82381 gtttcctgtc ttgtttactg ttgtctctcc cactanacag tgtggtgtac aaggacaggc
82441 gttatgtctg ttttcctcac ccctagatcc ctgcaacccc tggcacatag taagtgccaa
82501 taagtgattt tttgtttgaa tgaatgaatg aaagaggagg agaatcatga aagtgtaggg
82561 tcatagaagc caggagagtt tttagtacta acgagtcatt aacaacgtan acaaagcaga
82621 gggattggtg agggaaggag gggaagtgcc catttgctgg catatgggag cctgggagac
82681 tggtttcagc tgagaaagga ngggaagtgc ccattagctg gcatatggga gcctgggaga
82741 ctggtttcag ctgaggaagg anggcanaag ccangctgta ncaactgagg aatggacant
82801 gaggaanaag aaagagtgta ggctacattn ttgaaagttt gggtgagaag gggaggaaag
82861 ggttntgata gaagctagag gacacctgat cagggttggg gtggttcaaa ctgggagagt
82921 gctctcatat tataagcttg ggggcagctc canaggaaga anagctgggc gtgtacacct
82981 ggaagaagga tgtggctagg gcaaaggtac tctgacaaag aagaagacta actgccagct
83041 aggaaagaaa atggttattg aatgaatnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
83101 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
83161 nnnnnnngct tatcttgcat gcctgcagct cgactctaga ggatccccag acctattcta
83221 caggtggcag tggagtttaa ccctgaagga gtttgatcct gaaagggaaa tggcaaacgg
83281 agtaaaacac catgcctcag aatcatccta tccaagggca aaggaagctg gtgtttatta
83341 ttagattcaa cacgcatcta ctatatggct ctttgactta tccaaaaatc tggttgtgcc
83401 tagaatatag aactgtgttt gaatttagta tatcatattt ttattacaaa tacaagacaa
83461 tagatactgg ttattaacaa gccaaaacta cagagattga tacagaacaa gttagaaatc
83521 tgctactcta atcacagtgg cctgagggaa ccaatattag cagtttagta cgtatctttc
83581 tacatctttt tcagtgttcg tctgaatata taaaaataat gtatacagtg agtggtttcc
83641 ggttttataa aacacgaaca aatgaaatat ataacttgtt tattncattt aacaatagat
83701 tagtgacatg tcaccagata aatacacaga agtatgtatg tcagatgtgt aaatctagag
83761 tacgaattta ctaccattta cttagctgct cgctgaatga agtacacttc gggtgatgtt
83821 tcagggttta ctacatggga ctgctacaat agacaccgcc tgtggacagc agactggttg
83881 taatgtttat accccaagag cttcgagcct tggaaaggag acctctccaa aggacacctc
83941 ttacgcaatg ctcccggtta aatgggagaa acggggtcta aggggaaggg aacaaaactg
84001 gccacatggg atatatacgt tccacannaa agcgccaggn agcggccgcg tcaaattnta
84061 agctgctggt acattggaat ggactgtttt gcgacataga cacgaggcat ggctacttcc
84121 gcagaggcgn cggcaatggg aacgcgtgtg gggtgnnnnn nnnnnnnnnn nnnnnnnnnn
84181 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
84241 nnnnnnnnnn nnnnngctta acttgcatgc ctgcagtttg actcttanag natccccata
84301 taattcttta atccatcttg aattaatttt tgtataaggt gtaaggaagg ttttataagg
84361 ggattttccc cctttgcttg gcacttctcc ttcctgctgc catgtgaaga aggatgcatt
84421 tgctgcttct tctgccatga ttgtaagttt cctgaggcct ccccgacact gcagacctgt
84481 gagtcaatta aacctctttc ctttataaat tacccagtct tgggtagttt ttttgtagca
84541 gcatgagaat ggactaatac aggtaggtag aaatctttaa ttttatgaag gattatgcta
84601 gccttgctgg cttttggaaa ttgaaaagta agttaagtgt tgttatgaaa ccatccttcc
84661 tccaatcttc cttactttct tctgaatcaa atacatgact ccacctacct ctcactttcc
84721 aggaatggca ggtgttggag tcaggcattt gccattttaa ctgccaactc tggaaaatga
84781 ggaattggtt tgtttagtct ggagcagagc agaatgttca tgttcagttg aacatgatag
84841 ctgttttcaa ttntgaaaaa gctggaagag agtttagact tgntttcttt tctttctttn
84901 tttttctttt gagacagagt ctcactctgt tgcccangat ggagtgcatt ggcatgatct
84961 tggctcactg caagctccgc tttctggggt ccgaccattc tcctgcctca cctnctgagt
85021 agttgggatt acaggtgcct gccacctgcc cagctaattt ttgatttnta gtagaaatgg
85081 gttcaccata tgggtaggct ggtctggact ctgacctcag tgatcacctg cctancctcc
85141 aatgctagat ataagtgtga gcactgacct gactangact gtgtctgtaa tcacaagaaa
85201 acantccgng ggataaatgg aatannnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
85261 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
85321 nnnnngttta acttgcatgc ctgcagtttg actctagnag aatcccctgt agtgtaagct
85381 gagtgtgcag tgtttataaa gtctacagta gtgcacagga gtgtcctagg ccttcacatt
85441 caatcaccac tcactcattg actcacccag agcaacatcc cgtcctgcaa gctctattta
```

```
85501 tgctatgtgc cctacactag tgtagcacat tttatcgtct ataccatatt tttgctttac
85561 ctttactatg tttagataca caaatgctgt ggtacaattg cctacagtat tcagtacagt
85621 aacatgctgt acaggatggc agcctaagag taatagtctg taccatgtag tctgggtgtg
85681 tagtgggcta taccatctaa gtttgtgtag atacactcta tgatgttctc ataacgacaa
85741 aatcacctac tgacaggttt ctcagaacta tccctggcat taagtgactt atgactatac
85801 atagtgtgat tacatttttg taaataaaaa atacatgtaa ctccagcact gtgctcagaa
85861 cagttggtgg tagttaaatg ttaaaatctt tctatgccct cagatcaaca aagatttctc
85921 cattctcact gctctaatca ttcctcagga acacacacat aagaccagca agtacaaagt
85981 catctaacct gcctagatgt taggcctgtt tccatcctgt tccaagcccc tgaaaagtag
86041 gtgttacatg ctcatatatc atccttgacc cantccattc tcatggaagg gaacttccac
86101 ggggggaggg gaggagagga tanaagggcg attcacttan ntaatgagca acaaaaggcc
86161 tgagtgtagc caactcaaca gatctgcgaa atttcagtca ttgctcaggt ctttcttggt
86221 cccanccata gagaacaact gtggganattt agaatggact ggtagccggc accaaccctg
86281 cacccggnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
86341 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnngcc tagacttgca
86401 tgcctgcggt tcgactctag aggatcccca tcattgaaag tagacatttt ccagccagtg
86461 tggtggctca cacctataat gccagcactt tgagaggccg agatgggtgg atcacttgag
86521 gtcaggagtt tgagaccagc ctggccaaca tggcgaaacc catctttact gaaaatacaa
86581 aaattagcca ggtgtggtgg cggcaccta taatcccagc tactcaggag gctgaggcag
86641 gagaatcgct tgaacccaag aggcagaggt tgcagtgagc caagatcgcg ccattgcact
86701 ccagcctggg ttactaagca agcaagactc tgtctaaaaa aaaaaaagaa aaaagaaaaa
86761 agtaagtgtt ttcctaagag cagatgttga tcctaagcaa gtaagaaagt agaagaacat
86821 aagctacatt aggaaaaaag tgaattaacc attttttaaa aaaagaacaa atttcagaaa
86881 ggcaggctga gggaaagttc atctacttca aaacactcct agaaccagct ttgaacagaa
86941 tagttcccat tttgcaatac cacccactta gcaaagaaaa tccaattctc tangcctcat
87001 ggtggaaagt aaaactaagg ggaaaaaaga aagtacaaag ataaggagag ttcaaaagga
87061 agtaaaatat ccagaagagt cctttccaat ccagtactca actcagaggc ctcatgtact
87121 gatcaaatcc tagcctgcat tgttttccac gttttctgca gcaaacatga aatctgcctc
87181 atgctgaagc ttaagcttct gtaatagttg aattgttaag gccaggcaca ggggctacat
87241 ctataaccag cacttttggaa gctgggcggt aaacacaggg gagagttaag acaaccgggc
87301 cacggggaga cctgcnctac gaaaacaaaa tnnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
87361 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
87421 nnnnnnnnnn ngctttaact tgcatgactg cagtttgact ctagaggatc cccttgtttg
87481 agttcattgt agattctgga tattagccct ttgtcagatg agtagattgc aaaaattttc
87541 tcccattttg taggttgcct gttcactctg atggtagttt cttttgctgt gcagaagttc
87601 tttagtttaa ttagatccca tttgtcaatt ttggcttttg ttgccatagc ttttggtgtt
87661 ttagacatga agtccttgcc catgcctatg tcctgaatgg tatcgcctag gttttcttct
87721 agggttttca tagtttaag tctaacatat aattctttaa tccatcttga attaatttt
87781 gtataaggtg taaggaaggt tttataaggg gattttcccc ctttgcttgg cacttctcct
87841 tcctgctgcc atgtgaagaa ggatgcattt gctgcttctt ctgccatgat tgtaagtttc
87901 ctgaggcctc cccgacactg cagacctgtg agtcaattaa acctctttcc tttataaatt
87961 acccagtctt gggtagtttt tttgtagcag catgagaatg gactaataca ggtaggtaga
88021 aatctttaat tctatgaaag attatgctag ccttgctggc ttttggaaat tgaaagtaag
88081 ttaagtgttg gtatgaaaac ctgcttcctc caatctagct tactgtcttc tgaataaata
88141 catgactcca cctactctca ctttccagga tggcaggtgt gggggtaggg ctttggcact
88201 ttaactggcc actctggaaa atgaagaatg ggtttgttta gtctggagca gaacaaaatg
88261 tcatgtgtca ggtgaactaa agctggtgtc attttggaaa gctggagaga gtaaggctgg
88321 tgtctttctt tttttttttt tttgagacaa actactcttt gccagaggga ggctgacata
88381 actgggcgnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
88441 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnncc tagacttgca
88501 tgcctgcagt ttgactctag aggatccccc aacatactgc attgtggacc aggttcccnc
88561 acatgaaatt tgagggaaca cattcgaact atagcatgta gcttgaatgt agttgaaatt
88621 gggtatactg attccttcca ctttattctt tttcaaaatt gttttaacta tcctagttcc
88681 tttgtatttc tatacacatt ttagctaatc ttgtctatat acacaaaaaa tcttgctggg
88741 gtttggtaga aattgtggtc tccatctcat gccaagatgt ctcttcagaa tttgcgctaa
88801 atctgtacac agatttgaag agcactgcat gtttactatg ttgagccttc tagtccacaa
88861 acatggtatg cctttccatt tattaagatc tttgatttat ttaattagca ctttatagtt
88921 ttcaacatac aagttctgta catattttat tgtatttgca cctaaatgtt tcttttttatt
88981 gagtgatttt aaatggtatt atggtttaaa attttgatgt ctgcatgttc attgtttgta
89041 tacaaaaata aaatctatgt cttgtaccct gtgaccttgc tgaactcact tagttggagg
```

```
89101  agtatgttgg  taggttcctt  aggagttcct  atgaagacaa  tcaaattgtg  caaaaagtaa
89161  tagttttct   ttcttgctct  tcaagatgta  tgcttttttgg ccgggccagt  ggctcacacc
89221  tgtnatccca  ncactttggg  aggccaaggt  gggaggacac  ctggaaggca  gaagtttgaa
89281  agaacctggc  aacttgggga  aaccggcctt  ctaaaatccc  aattanctgg  gagcagggggg
89341  acacctgtaa  tccagtactt  agagtttaag  caaattgctg  acccggggggg gggntgtgca
89401  gggccaagtg  aaccctgacc  caattggata  aaacnnnnnn  nnnnnnnnnn  nnnnnnnnnn
89461  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
89521  nnnnnnnnnn  nnnggcctt   gactatgcaa  gccctgcggt  tcggctctan  aggatccccc
89581  ctttttctttt atatatgaat  tttacataca  ggaacaatgc  tgtactgtct  tacttgtttt
89641  attttgaggg  ttttttttttt tctattttct  acaaggacaa  atgtaccaac  ttaaaataaa
89701  ttttggaacc  ccatttggag  ataaatctgt  cattcctccc  taaacctcag  ttagagacac
89761  ctcaggaaaa  ttattttaaa  cttaagaaat  atttgggcca  gatgcagtgg  ctcacgccgg
89821  taatccccgt  acgttgagac  attgacgtgg  aaggattgct  tgagcctaga  aggtcaaggc
89881  tgcagggagc  catgatcaca  ccactgcact  ccagcctggg  caacagagca  agatgccgtc
89941  tcaaaaaaaa  aaaaagaaa   gaaaagattt  gttcagtaat  catttggtta  tgcatttcan
90001  aattgctgtt  taatatcttc  ccggtaccag  gtacagtggt  tggtaccgag  gattcagtga
90061  tgagcaggag  agatgtggtt  ccttccactt  cgaattatag  cttagaagag  acaattttag
90121  acacgtgatt  atgctcaatc  aatacataat  tgtaaaatat  taaaagaatt  actaggagaa
90181  aaatgaagga  tgatgaaaaa  ttataacatg  gacatccaag  ttacaatgga  gggtcagaaa
90241  gtgttccctg  aagaaattta  tatgtaacct  aggctctcaa  gatagatgta  aattagccag
90301  catagcatgg  tattttatga  aaacaatacc  aagggaattc  tggtttgttt  ctctgggggcg
90361  ggtggtttct  ttttggagat  ggagtcttac  ctttggcacc  caggctggag  tgagagggga
90421  caatctgggt  acatgtgaac  tccacctgcg  gggttaaaga  catctccgtg  ctcaccctct
90481  gagtggctgg  gaacaaaggg  cggcccacat  cacgggtaat  gtcnnnnnnn  nnnnnnnnnn
90541  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
90601  nnnnnnnnnn  nnnnnnnnnn  nnnagcttta  acttgcatgc  ctgcggttcg  actctagagg
90661  atccccagga  tgcttttaca  ctgttggtgg  gagtgtaatt  tagttcaacc  actgtggaag
90721  acagtgtggt  gattcctcaa  ggatctagaa  ccagaaatac  catttgaccc  agtaatcccg
90781  ttactgggta  tatacccaaa  ggattataaa  tcattctact  atgaagacac  atgcatgcgt
90841  atgtttattg  cagccctact  cacaatagca  aagtcttgga  accaacccaa  atgcccatca
90901  atgatagact  ggataaagaa  tggatagaat  ggacatagac  accatggaat  actatgcagc
90961  cataaaaaag  gatgagttca  tgtcctttgc  agggacatgg  atgaagctgg  aaaccatcat
91021  tctcaggaaa  ctaacacagg  aacagaaaac  caaacacttt  catgttctca  ctcataagtg
91081  ggagttgaac  aatgagaaca  catggacaca  gggaggggaa  cataacatac  tggagcctgt
91141  tgcggggggt  gggggactag  gggagggata  gcattaggac  aaatacctaa  tgtanatgac
91201  aggctgatgg  gtgtagcaaa  ccaccatggc  acgtgtgtac  ctatgtaaca  aacctgcaca
91261  ttctacacat  gtaccccaga  acttacagta  aaaaaaataa  actttaaaaa  ggatatgaac
91321  tctttgttnt  ataaaatgta  tattataatc  aggcacagtg  gcccacacct  ataaccttaa
91381  ctctttggga  ggctgaggca  ggcaatcact  tgagctcagg  atttgagacc  agctggacac
91441  acggcaaacc  cattctaaaa  agacattaca  aaatagccaa  tggatggtgg  gggggggcatg
91501  cctgtatcca  ctactggaag  ctgaggcagg  gtcattgaac  cagagtcagg  ctgaatagcc
91561  atnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
91621  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nngctagact  tgacatgccc
91681  tgcggtttcg  actctagnag  gatcccctgc  agtggtgttg  aggtgactat  gtagaaagtg
91741  cctgcttctg  gtgccacttt  catctcagct  gagaaccaac  acatgaggag  cttcctggga
91801  gcccagccag  gttcctctgt  ggccaccgct  acagtggtga  cccctgacca  gccagaggcc
91861  agccccaggg  catggagtcc  tgggcagaga  ctggcagcga  tggtggcagg  gcaggtgatt
91921  agatactgaa  agtatgtagg  agggtgctat  gggcaggtgg  agatgacaaa  acaagccttg
91981  ctcactgcat  agctttgcag  agaaactggt  gcagagaaac  tgaagccaag  gttagaggga
92041  tgaaaacaga  gcagtttcca  gatcacttct  gttttcccct  tacatcaggc  acacatgtca
92101  atcctgaaag  tcccaggtgc  ccacttctgc  tgtacttggc  acatggaaat  gctgactgaa
92161  accacagtca  gggcagcaga  aactattctc  acagggtcct  ggcagtagct  cagacaggtg
92221  ccctttctgg  gccaacagaa  atcaactgtg  ggggtgtctg  tgctgaagac  agagacgggc
92281  tggcaagttt  atgcaaagga  tgctctcctt  gaaaaaagaa  tgataactct  tagttaatca
92341  ttcccttga   aaatagaaag  cactcggtta  cacattagtg  attattattc  tttcacccta
92401  ctccttggtt  ttgccctctc  tggacataga  tttcttgagc  ctatttctga  ttggttgggt
92461  ggtgtgtatt  gacgtggact  ccctttgtga  tagtgatgca  ggtnatgagc  actactttac
92521  tgccggtgta  gattcaggac  acctgaatgc  tctgtgggga  agattggaac  agaaaggca
92581  aaatcagggt  caagacttga  agctttccag  cnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
92641  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
```

```
92701 nnnnnnnnnn ngcctagact tgnctgacct gcattttcga ctctagnaga tccccttggc
92761 aaaataaacc tgcagtcaat taagatctac ctcagtcact ctttgggta tgctgtaatg
92821 gacagcagag gtccaagcag caatcagagt tgtctgagtc atagaaacct atggcattgg
92881 ctagttgatc atggcgtttc tcaaagtaaa atagatagga agcctatgaa attcttaatc
92941 tgcataagca gaaaagctct aggttaagtg acaaaagtct aacacgaatc ataaaaacag
93001 agaatcatga tccctcaatt aattcccaga attgagcctg tttacaaacc taaaacccct
93061 taaatgaagg ggaggctgga gcccttgagg aaaggccctg gtaccctact aaatgtttat
93121 actgttaatc tttctctcag ttttccccaa aagagatgta tggcctttt actagggtaa
93181 ctgtgcattg agaaaagaga aataatcaga cctctcaggg cttactggac attggctctg
93241 agctgacact aatttcagga gactcaaaat atcactgtgg cctgccagtc agaggaggga
93301 cttttgaagg tcatgcggtc aatgggattt cagctcaaat ccatctcaca gtgggtctaa
93361 tgggccccaa tgccatcctg tggtcatttc cccagttctg gatgcacaat taggatagac
93421 atacttagca gctcacagaa tctctacatt gggtcctgaa tcgtggagta agggctatta
93481 tggtggggaa gggcaagtgg aaagcactag aactgtgtct acctaggaan atactaaacc
93541 aaaggcanta cgactttct gggggaactg tanaggtcat aaagacctga agatgcaggg
93601 gtggggattc caacacattt ccttcaactt tcaattggct accatttgca gaagcagggn
93661 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
93721 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnng gccttgagtg gcnatgcctg
93781 caggctcggc tctagaggat acacctttaa aagtgtttca aacttttcccc caccaaaaga
93841 tctgcttttc gaaaactggg atctttggca actctgaaat ttgcccagca tgcctttctt
93901 ttgggtctct gagtctcatt tcttttaatc tgagaacttg atgatttaga catctaacaa
93961 cctaggaaac agggattttt tttggggggn gnttgttgtg tggggggggg ggggggccgc
94021 nctctcgttt tttttttgt ggtggttnng gtgtggggtg ggggtnntg tggtgtttgg
94081 gtgtgtgggg gtgtgggcgg gcgcttcccc cnccgggggc gccgcggccg ggcccggccc
94141 cctcgcgcgg cgggcgggtt tttggggggc cggcggcggg ggggggcggg ggggggctcg
94201 ggcgggcggc gccccgcgcc ccggggggtc tcccccgcgc tgtccggccc ggcggggggcc
94261 cggggggggcc ggcgtgtcgt gcccccgtct tcctggcgcc ctcggggggc gggggcgggg
94321 cggggcgggg gggggggggc gcgtgccggt gggcgcgcgg ggggcgccgg cggtctgggg
94381 tttttgttgg gtgggggggg tgggcctggg gggtgtgggg cgcgcgnggg gttggggcgg
94441 gggcgcgttg gtgcgggcgg ggtgggggcg gggggggggg gcgtgtgcgc ggcgggggggg
94501 gggggttgcg tgcggtggcg tcggggttcg gcgggcgttg ggtcggctac ggtcggtgcg
94561 gcgggtggaa gaagaagaga ggcnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
94621 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
94681 nnngcttaac ttgcataccc tgcatttgac tctagaggat cccctctttt gagaagtgtc
94741 tgttcacacc cttcacccac tttttgatgg ggttgtttga ttttttcttg taaatttgtt
94801 taagttcttt gtagattatg gatattagcc cttcgtcaga tgagtagatt gcaaaaattt
94861 tctcccattc tgcaggttgc ctgttcactc tgatggtagt tttttttgc tgtgcagaag
94921 aagctctcta gtttaattag atcccatttg tcaattttgg cttttgttgc cattgctttt
94981 ggtgttttag acgtgaagtc cttgcccatg cctatgtcct gaatggtatt gcctaggttt
95041 tcttctaggg tttttatggt tttaggtctg acatttaagt atttaatcca tcttgaatta
95101 attttgtat aaggtgtaag gaagggatcc agtgtcagct ttctacatat ggctagccag
95161 ttttcccagc accatttaat aaagagggaa tcctttcctc atttcttgtt tttgtcagat
95221 ttctcaaaga tcagatggtt ttagatgtgt ggtattattt ctgagggctc tgttctgttc
95281 tattggtcta tatctctgtt ttggtaccag taccatgctg ttttggttac cgtagccttg
95341 tagtatagat tgaagtcagg tagcgtgatg ggtaccgagc tcgaattcta atcatggtca
95401 tagctgtttc ctgtgtgaaa ttgttatccg ctcccaattc acacaacata cgagccggga
95461 gcataaagtg taaagcccgg ngtgcctaat gagtgagcta ctcaccataa ttgcgtgcgc
95521 tcactgccgc tttcagtcgg aaacctgtcg tgcagctgca ttatgaatcg ccaacccccgg
95581 gagaggcgtt tggctatggc ccccaggtgg gtttttttaa ccatgagacg gcaaatggtg
95641 gcctcacggc tgcctgnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
95701 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnctgc
95761 atgcctgcag gtcgactcta gaggatcccc atgtttgtag aaagcattag tgaataactt
95821 ggagtaagat gatctgggtt tcagctttta gttggttatt tcctatttgg gaagctttta
95881 gtaagtcaga tgttctctga atctcagttt cctcatctgt aacatcaatc atgatgataa
95941 ttcctaagct cacttttat gggaatgaaa ggcatatgga aaggacttgg tatagtactt
96001 gtcagagatg gttattattt ttaggtgacc acaccaaagt tgtaaaatat gttagtgttt
96061 gatacctcct tgttgggatt ataatataaa atgtctgggg ctagaattta gccagatccc
96121 actggtgaca cctcatctct ggttggaatt tcctgccctc ttctcaaagt acatacctt
96181 gtcacttcac atggataatt gttgaagtaa tttacttatt gtttgtcctg gcttcaatgt
96241 tgccttcttc atctccaatt tctttcattc attcattcat tcattctttt tttttttcc
```

```
96301 caagacagaa tctctctctg ttgcccaggc tggagtgcag tggcatgatc tcggctcact
96361 gcaacctccg cctccggggt tcaagtgatt ctcctgcctc agcctcccta gtagctggga
96421 ccacaggtgc caccgccacg cctgttgagt ttttgtattt ttagtagaaa gccatgttgg
96481 ccaggcttgt ctcgagctcc tggccttaag tgatcctcct gcctctgtgt ccaaagtgct
96541 aggattacag gcgtgacccn cacacccggg ccctttcttt ctcttttta atataatttt
96601 ggtcatcttc ctctagacaa taggataatc ctttacaaca tttttctgta agacatttac
96661 ttttggtaaa tagtgaaann nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
96721 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnct
96781 cgactctaga ggatcccctt gcatcgatgg tgcaatagag gtggtgggta aaatggtggc
96841 tgcctcagta caaatcagga caatagtggc atcaatgtac ttgcagaaaa aaaaagtcct
96901 ttaacttaat aatgtccttg tttagggagt acaagttatt aatttgatta aatattaact
96961 tgagtacact tgtttgacaa aataagaagc actcgtaagc aattctacta tatacggagg
97021 tgtgatgatt gtcttggggt aaagcagctg tgcaattgtt tgagtcgcgg gctgaaccgg
97081 acactttttt cacggaacac cattttatg ccttgcagac aaactatggt tatgtagagc
97141 taagtatttg cagaaatttc tgcaaataa ataaagtgaa atacacagaa acagagagta
97201 aaacagtgat taccagaagt gagggtgagg tgggggaatg ggaggtgtag gtcgaagggt
97261 acaaagttgc agttgagttc aagtatttct cgtgcttcag cctcccaagt gtctgggatt
97321 acaggtgcat gccaccacgc ccagctaatt ttggtatttt cagtagagat ggggtttttgc
97381 catcttggct aggctagtct tgaactcctg ggctcaagtg attcacccac cttggctttc
97441 caaagtgtgg aggttacagg cgtgagtcac tgcgctcgag ccatctgact aggtatattt
97501 atattcaaat atgtatacta tatatatg tatgtataca atatgatttt attaaatggc
97561 tctcgtgggg gtcgcgtggg tgggacaacc cccccttgca cgactctttt ggggtggcga
97621 aggcgtgtgg ggttgcttgc tagtagggaa ttaggggctg gggtgacgca cagtggctgt
97681 gatctatgcc tactaaatat tttntcttgt gccgtggnnn nnnnnnnnn nnnnnnnnnn
97741 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
97801 nnnnnnnnnn nnnnnnncta ccagccaaaa acgtccagga ggattgtgtt gctgcagcaa
97861 cgccaatccc tcccaattgc aagaaaagca acgtacaatg tgacactctt ggtatatgtg
97921 agccccactt tgatcacgag cagggtaaag caatgcttct taaatttcaa tgggcacaaa
97981 cgtgatctgg gggatcaacc gaagatgaac tttctgattt agtagaccag ggtaggggca
98041 gagattctgg atatctggca agttaccaga ttatgttggt agttggtcca tctttgtgc
98101 agcaaggggc tagaatattt ctcaataact aaataaaaaa aaaatacact taagggcttc
98161 tccatggagg ttcactactg aacagtaaaa actcataaat ataaactaag ctcccaaaga
98221 gcctcagaaa atcaatctct aacagagggt agccagaggt ggacactggt taatatctgg
98281 caactctgac caccttgaat ccccgtgtct atttcaggt aaaaattgga gtcacctaat
98341 ggctagatgt tatcagggcc atacatgtca gagcttcctc aggattctgc cccattctag
98401 ttctacacac acaggaaaga ttacagaaca tatctgaagt atttctccag tatgtataac
98461 tggagataat ccggagagcc cattcttgta ggttgttgtg gagggtaaac ccggggtgaa
98521 cagggccgtg gtggtgctag ttgggttccg gaattgggtt tcctctgggg ttcttgggtc
98581 tcgctggact tccagaaatg aagtcggggg accctcatgg tggagtgttt ataggtcta
98641 ataggaggtg tgtccagagg ttggttccct tccgatagtg cagaccgggg gacagaggtt
98701 cttccctgtt gggggggcttt nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
98761 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
98821 ttgcctgcag gtcgactcta gaggatccct ctggtctgtt ttagtcttca acatgccttc
98881 ctcattgagc ttaatcattt ctagcttttg atttaaagtg agagatttgt gactcttcct
98941 ttcacttgaa tactcaaaga ccattgtagg gttattagtt ggcctaattt caatattgtt
99001 gtgtctcaag gaataaggag gcctgaggag agggagagag atgggggact ggttggtcag
99061 tggagcagtc agagaacaca tttatccatt taagtccacc atcttctgtg gatgcggtcc
99121 atgggaccaa aacaattaca atagtaacat caaagatcac tgatgacagg tgaccataac
99181 agatatgata ataatatata ttatataagc tgtaagatat tcacatctat ttccttatac
99241 ttatttccta attatgaaat taatactacc tttttcaaaa aattcaagca atacataaat
99301 gaatacagca tagaaagtgt tacactcctt taactagcaa agagctatgt tcttcagcat
99361 ctcttaaccc cagcctattc ccagcttctc agccaccaag atgtattcat gacaattcac
99421 cctccatgcc agggttgggg aatcaccttc aaagagaaac aggaggtctg ggcaagaata
99481 ctagccagta cttctaattt aaaaaaagag ctatcactct gggttattaa gcagtttcca
99541 tgtaacaggc actgtgctat gctctttctt cctattatct cacttaatcc gtgggcacag
99601 aactttgaga caaattcctn ttttagtgca tccgagggtt acattacttg gccagggacc
99661 cccagggcaa gggacaaggc tgtcttggta tctcaggctt ctgggcccca agcctcccac
99721 actgctctgc attccaagaa atacttttnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
99781 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
99841 nnnnnnnnca gcatgcctag aggtcggctc tagaggatcc cctgctcatt ccccagctgc
```

```
 99901 caggattgtt actggctgat gacccacatt gagtcctccc taagaattgc ccttggcaaa
 99961 gggagctgtg tccccttcct ggggacactc tgcatccaat gactggctga tttggggccc
100021 gcccgctttg tctcaattca ggacatccct gaagcacttc cccagcttca gggctcccct
100081 gggaatcagt ggagacctct gttgcaactg aatcacagtt caagtcttct ctgtgcccaa
100141 tctggcttcc ttcacaccct gtggctgctg tgcctgagag cacccaccgc cataaccctc
100201 cttgcacaca aatctccagc tcagagtttt gttcccaggg aagtcatcct atgacacctg
100261 ctatcatgaa gcttatatac taggagtgat agaaaataaa cacaaatagt aacacagtta
100321 tgtgaaaaat tacattgctg tgggaagaaa tagagtgggg tcaggggatc aggaatacag
100381 attgggaaga tgattaattt ttcatattca atagaatgat tggactggca tctctgagaa
100441 tgtgacactt gagcacagac ttggcaatta gcagactgaa tgtccagaag cttctgcact
100501 ccaaaatttg agcctggatt cgtcaggatt tcccagagaa aacagcaaca attaggatgt
100561 gagtggtgtg tatgtgtgtg gtgggtgtac agatatgtgg agttggtaca tgcatgcaaa
100621 ctcagatctg ttttcaagga attgggtgaa tgggcttggt ggagccctgg caagtcctga
100681 gagctttcac ggaatggccc gccaactgga ataaggttgt gaattggttg ctttaagtct
100741 taagggcagg attttcttgc ttgccctgag gatacctcac atttttgtcc ctgaaannnn
100801 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
100861 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnntctt gcatgcctgc aggtcgactc
100921 tagaggatcc ccttgtgagt ttgttttgt tgtatttatt tgttttgtt catgagtaat
100981 ccataacatt gccttcatgt attctgaaaa tgattgggaa ctgagtccta gtcgttttct
101041 ctttacctgt catgagtggg gagagttggg gaagcctgac tcataagaag acttgccaag
101101 aagaaagtcg agttaatgtg taataatttt gctacgggca gattgataaa acaacaacaa
101161 caacaataag atctcaatat cctaactgta gacattctag gtgaccttca aaggagtcta
101221 gtgggcgatt taagactagt tgcttatttg ctaacatatg tctaaggaat atgttctatg
101281 gtggtttctt cttggcagga actccaatct ccttccttct cttgaacact gggatgtgtt
101341 tgcattgctt gtcttgtgat ggtgaccata taaagcagag gccagtgctt tagcctctgt
101401 gttgcagccg cttatccctc ctaaaaagct gggaggtttt gtgatgtgag aagatgatcc
101461 tggctcatcg gttggagcca gacatgttag actagaatgg agacaaaagg aacatctaga
101521 gtctattcca tgtgaatgtt tgagggttga gggtctgggg ctaactagag aaagaaacgt
101581 gcctaatatc cctggcttag aatctggact gccttcatgg ttagcccttt ggaccaagct
101641 tttagttggc ctggactcag aggctgccaa gccaaaaagc tggggctgcc tcttctggag
101701 agagagcaga aagatagaat agtgggaggg gggaaaggta acttgtttaa taatacagag
101761 cactctgttc ttcttaataa agtctgtcct ccggagaaac tagttaacaa gagctaatcn
101821 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
101881 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnc tgcctgcagg gtggaatact
101941 agaagtctcc acctgaagtc aaaagtgtag cttgtggtaa agcatatgag atcaaccacc
102001 tcctatgttt tcacagttct gctctgcctg gagggaagta ccagctccaa aggaggtcca
102061 gctggtctcc tgtgagcagg atttgcaggc tgagggttaa aggcgctcta agccatggag
102121 cacctctgac ccccactggc tgctgtcatg cattgcacct cagggatggc caaggccctc
102181 agtacattgc cctttcctaa acacaagtga ccagtttctc ctttgctgta ttgtcaggac
102241 tttccaccaa gtgccatcta tttctcatcc atctcctttg aaatattttc actctttatc
102301 tacttctcct ctgggctggt agatatttct aagtcattgt atagtgcatg gattttattt
102361 tcattttcgt ttgatcagaa aagtgagtcg agaagatatg acattgttgc atatgtggtt
102421 gattttcatt tctctttttc tcatcctttt ggtgacaaac accaggagct gcttcttttt
102481 gtataagaag tccttcagca cctatactgg tcatcatctg aagcgcatgc tctcttgcgg
102541 tacctttgat agagcgagag caccacccac aggaacaaaa catgccctga gtctctggag
102601 agaggctgga cagttaaatg agaccagggg ccatggacca caaagcccgt ccgtaatcag
102661 agtgctgcat caatggcgca cactcaagtg gtcgattcca tcgggtaagt ttggtatctg
102721 gtatggctct gtcaatttgt atgatagctt gggaagctga actcatgaat tagaccagac
102781 caaagccacc tgggggaaa cgcggggtta tttgttgggg aaggaacatg ccctcccagc
102841 tttgtggtga gaaccgagac nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
102901 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
102961 atcgactcta gaggatcccc ctgtctcaaa aaattaaata aaatgtatat tacagtcaga
103021 caggctactc tgtgaattct gaatgggcca ctgtctctaa tcagaaagct ttgtagatat
103081 tcttggcaca tggcaatggc atcctcaatc agtgtctatg tggctttact aaaaattaac
103141 caaagatcgg ttttatttct taatactaga caagactgat caagcaataa gaagttgtgg
103201 tgtacttgcc atgttcaggg agtatataag gcaatgaatg caaggttgc agcaaagaaa
103261 catgggacac agtcctgtaa tataagaagc tatctaccta ggaagatgag gcccaatccg
103321 atacaagcaa taaagaagta tcaagtaatc tctttactga taatactgat caggatagta
103381 atagtggcag tgtattgagt gtttactctg ttccaacgac tgtgctaaat gctttatata
103441 aatcatgttg ttgaatcctc aaaacaactt tattaagtag gtactataat tattgccact
```

```
103501 ttaggggtaa ggaaacgaac ccacataaag tttatatcat ttgccaggat tttattccag
103561 gctgtccgac accaaagacc atgcctttaa atatccagca atctgtaaat gcctcataag
103621 agtcaaaggg aggttcaaag tgggggagga tcagcatggg gatgggatga agaccttcac
103681 gggaggaggg aatcctggga agatgtatga tgttggtttg ggggtataaa aagagggatg
103741 ggaggaagat ctttcccatg gaaatggagg ggtgtaaggg agatggtgag tggcactcac
103801 caggggctgta ggaagttgtg ataatggcgc aaaaggcttc attgtggggt cccaatgaga
103861 ttatccctgg ccggcaacat gcaccacccc tttttttggct tggaatggtt aagttggagg
103921 ggttatatgg gtggttctgt gagacagana ggcnnnnnnn nnnnnnnnnn nnnnnnnnnn
103981 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
104041 nnnnnnnnnn nnnatgcctg caggtcgact ctagaggatc cccagaccca tgttcacagc
104101 agcattattc acaatagcca aaagatggga acaacgcaag tgtccactga caggtaatga
104161 ataaacaaaa tgtgatgcat acatacaatt aaatattatt aaatcttaaa aagggagata
104221 attctgacac attctacaac atggatgaac cttgaggaca ttatgctaag tgaaataagc
104281 cagtcacgaa aggacaacgg ttattgattc cacatacatg aggtgccttt agtagtcaaa
104341 ttcatagaca gaaagcagaa tggtggtttc cagggactgg ggatgggaaa gaatgggaag
104401 ttacagttta atgagtacag agatttggaa gatgaaaaga tgagtttttag tgatggttac
104461 acaacagtgt gaatggacat aatgcaattg aactgtaagt acacttaaat ggttaaaatt
104521 tcaaatttta tgtatctttt accacatttt ttttttttt ttttgagaca gagtctcgct
104581 ctgttgccca ggctggagtg cagtggcgcg atgttggctc actgcaagct ccgcctcccg
104641 gattcacacc attctcctgc ctcagcctcc tgcacaattt ttttaattaa aaaaactctt
104701 taactatctg aaggctacta tcatgacccc tggaataatc ttcagagtag acacatttat
104761 ctccttcaac cattcttcac gtgacatgat taaaggtcat tcatacctcc agtcactcac
104821 ctctggatgt gctgcagcca ctatacccct gtttatttga agacatagaa ctcaatatga
104881 cactggacag ttaagaatgg aaaagggcta tcactggcct caatatggct actaggattg
104941 ggtattcagg caggacttcc tactaaatta ttacaacgct ggttattnnn nnnnnnnnnn
105001 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
105061 nnnnnnnnnn nnnnnnnnnn nnnnnntttt catgcctgaa ggtcgagtct agaggatccc
105121 cctggattac agatgtgagc cactgcaccc aggctgtttt caaggttttt taaaattttt
105181 tatttatttta ttattattat actttaagtt ttagggtaca tgtgcacaat gtgcaggtta
105241 gttacatatg tatacatgtg ccatgctggt gcgctgcacc aagtaactcg tcatctagca
105301 ttaggtatat ctcccaatgc tatccctccc ccctcccccc accccacaac agtccccaga
105361 gtgtgatgtt cccttcctg tgtccatgtg ttctcattgt tcaattccca cctatgagtg
105421 agaatatgcg gtgtttggtt ttttgttctt gcgatagttt actgagaatg atgatttcca
105481 atttcatcca tgtccctaca aaggacatga actcatcatt tttaatggct acatagtatt
105541 ccatgatgta taaaaaacga tggttagatg ccacgaagta ggtggcaatg gcttaaccgt
105601 atgcgtgttg tcaggcccga gggccagttc gcatccttgt caaggggagt gctaaccttc
105661 tctcctttca tacaacacgt tttcagggtt ttatagggga aatggaaacc cataggtgca
105721 ggacaatagt gacctgctgg ctctagtcac ctgacataaa atattcatta tcataataat
105781 gatcatagct gccatacaat ggttattcta tttaatctgt ccaatacagg acagagatta
105841 cagtttccct ttaaaaggtg ggaggtctaa agctcagata ggttacggag cttgtttgca
105901 gccatacaaa tgatcaatgg gtggactagg attgggagct gtctctcttc aacttaaaag
105961 cacaatggct tttaccttcc tcccaatgcg tccttgaggg agtgttgcct gggtannnnn
106021 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
106081 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnaattc atgcctggcg aggtcgaggc
106141 tagaggatcc ccctggtccg tgtttgttac ggcttgagct gagctttcgc tcactgtcca
106201 ccactgctgt ttgctgctgt cgcagaccgc cgctgacttc tatccctctg gatccagcag
106261 ggtgaccgct gtgctcctga tccagcgagg cacccattgc tgctcccaat cgggctaaag
106321 gcttgccatt gttcctgcac ggctaactgc ctgggttcat cctaatcgag ctgaacgcta
106381 gtcactgggt tctaggttct cttccgtgac ccacggcttc taatagagct ataacactca
106441 ctgcatggcc caagattcca tttcttggaa tacgtgaggc caagaacccc aggtcagata
106501 acacgaggct ggctaccatc ttggaagccc cccgccacca tcttcggagc tctaagaaca
106561 aggaccccog gtaacaatat cttggtccac aaaatatcca gttgaactga ttgaagggtg
106621 gttaagtatg tagtttttgc actcaacttc ccctctccct gttgataagg taaacctgat
106681 tattctctag ggactactgc ctctcctctt ctagcccaca ggctgattca gtggaattgg
106741 ctatatccct ggtcaggggc agaacatgtg ggtttagaac taagccactc agcactagca
106801 ttgatctggg ccatggagat gggttcaggg gtgtgatcca attagagccc agaaaaagca
106861 atgatacgtt tgatatgtgg actggggttg tcggaaacaa taaggtcgct ttattctacc
106921 aacgtggacg tgggaagcaa ctgggtgaca gcgtattgct aacagcacaa aagtaggaga
106981 tgagatgctt agcctgggca cgaaaggccg catagcactg gtaaccggaa cagaggaaaa
107041 gggatatgaa nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
```

```
107101 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn taggatgatc
107161 ccctagcgca cccggatatg gaaattcgag gacgggggttg agacacaaaa aacccttcaa
107221 aaaatcagtg aatccaggag ccgctttttt gaaaagatca acaaaattga tagaccacta
107281 gtaagactaa taaagaagag agaagaatca aacagatgca ataaaaaatg ataaaggggga
107341 tatcaccact gatcccacag agatacaaac taccatcaga gaatacaata aagcacctct
107401 acgcaaataa actagaaaat ctagaagaaa tggataaatt cctggacaca tacaccctcc
107461 caagactaaa ccaggaagaa gttgaatcct tgaataggac aataataggc tctgaaattg
107521 gggcaataaa ttaacagcct accaaccaaa agaagtccag gaccagacag attcacagcc
107581 gaattctacc agagctacaa aaaggagctg gtaccattcc ttctgagacc atgtcgatca
107641 gcagaaagag aggagatcct ccctaactca ttttatgagg cgcgcatcaa cctgattacc
107701 aaagcctggc agagacgcga cacaagaggg gattttgggc cgatgtcctt gatgaatatt
107761 gatgcaaaaa tcctcattgg agttctgggt aaccgagccc ggcagcacat caagaagcgt
107821 gttccaccat ggattcagtt tggcttctac ctgggttgcg tggctgagtt cagcatggcg
107881 caagtcgata gatgtagtcc ctcctttgtg gcagaagcga agacgaggac cacgtggatt
107941 gtctcagttg gtgggcggaa cgggctgttg acagaattgc agcgggcttt cgtgtttaaa
108001 tgactcccga tcatgtgagg tttgtgatgg ggagagtcgc aaaagagttg gtagttgtgt
108061 tttgttaatc cccagccagt tgatttactg gagtgtggnn nnnnnnnnnn nnnnnnnnnn
108121 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
108181 nnnnnnnnnn nnnnnnnnca catgtttaaa ggctgttgaa atgtctcatt ccagggatgc
108241 acgcccttga tgcctgcggt ttctggacgt caagcggaca cagtgaagct gctgttgaag
108301 atgggagcca atattaacat gcagagatgc ttatggccgc acaagtttat gcctggccac
108361 ctacctggta ctgacttgtg cctgtcacag ggtggaagag agcagggtag gcgaagggtg
108421 tcattatggg gtcccagttg caaaggagca ttcttggatc tatgcagctg gctaaaggag
108481 ctggaacttg aagctgttac tccaatcatc ttcaacgttt atatccccac ttagagttgg
108541 tttcatgaat ttgggccatt ttggatcttc ctaacaatcc tctaagatag aggtgatatg
108601 gccacttaga ggaacattct tttctatctt aatggcatca gaatttctct tgggatattt
108661 ctggacacac ttggtgcttc taaaaacaat ctcgctaaat aaccccaaca gggtgggagt
108721 actgtgaaga tccattaaca tctgtggggt acgattggtt gagtagccgc ttgaggctca
108781 gggactgtgg agaaaaacca gaactgggga agggtggtag ggagggactc gaagatacag
108841 aacaggggga gacaaaagcc ggctcttaaa aggacaacga ccaagccggt gagtcagccc
108901 gcagtcaagg cgcaagtgta cacactgtgt cataatgcta gttctccacc gtggagattt
108961 gcattcagca cttttccaaca gtgagagcag gctgggttaa gcctactgaa atcctcaagc
109021 ccgctcctgt cagactcctc cgggaaccct nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
109081 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
109141 nnnnnnnnnn tgcctgcagg tcgactctag aggttcccct taaatcttta atccattttg
109201 atttgacttt tgtatatggt gagagatagg ggtctagttt tattcttctg catatagata
109261 tccagtcttc cagcaccttt tattgacgag actgtccttt cccaaatgta tgtcttggtg
109321 cctttgttaa aaatgagttg actgtaaatg tgtgaacttg tttctggaat ctcaattctg
109381 ttccattggt ctacgtggct gtttttatgc cagtatcatg ctattttggt tactatagcc
109441 ttgtagtata atttgaagtc aagtaatgtg atgcctccag cttaagtcaa tttacataga
109501 ttttgtgtat tcgtttggat tttctttta atcactgaaa aagttctgac tgataaaacg
109561 ttttaaaaaa gaacttggag ttttagctgg aaaattagct ctatagaaat aaacagcgtt
109621 gtaataaatt agtaggaagt ctggctgaat taccaaatct agtagccata ttgagggcag
109681 tgataggcct tttccattct taactggtca gtgtcatatt gaggtctatg gtctcaatta
109741 aacagggta tagtggctgg agaacattca gaggtgagtg actggaggta tgaatggact
109801 ttaatcatgt cacgtgaaga atggttgaag gagataaatg tgtctactct gaagactatt
109861 ccagggtca tgatagtagc cttcagatag ttaaagagtt ttgttgactt aaacaattgg
109921 tgcaggaggc tgaggcaagg agaatggtgt gaatccgggt aggggcgttg cagtgagtcc
109981 acctcgcgcc actgcactcc gagctgggca acagagcgag gctctgtctc gaaaaaataa
110041 ataaagatgt gggtaaagtt cctacaattt tggnnnnnnn nnnnnnnnnn nnnnnnnnnn
110101 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
110161 nnnnnnnnnn nnntcgactc tagaggatcc ccagtggatt tgtcatttaa gaactactca
110221 cccacactgg agggtctaga agacatactt ttagcagtac cgtgagatat aggaataaat
110281 ctgtgagggg aacccagcat cttttgaagag ttctgtgatt gctcttctct gcagacagtg
110341 agaactgcag tcattgaatt gggaaaccta aatgcagcgg gaataattgg atcctaggat
110401 ggtagggcta agtggtggta ctcaactgcc aaagacaagg tgggcatagt tactgttgtg
110461 gaaaaaaaat agaatcatgg caccccaaat tcactctgcc acagggaaat ttaagcttga
110521 gaactgagtc atgcaaaaag ctgtcttctt tcgttcccaa acagatagct gtattttcac
110581 atgctgactt tatcatatgt agagttactg ggcatgagag aaatgtgtaa ttgctttttc
110641 ccctattccc tcttttttttt ttgttttttt ttttttgag acggagtctt gctctgttgc
```

```
110701 ccaggctgga gtgcagtggt gtgatctcgg ctcactgcaa tctctgcttc gcaggttcaa
110761 gcaattctcc tgcctcagcc tcgcgagtaa ctggggatac aggcccccac caccacaccc
110821 ggcgaatttt ttgtattta ggtagagaaa gggtttcacc gtattgggcc aggctggtct
110881 caaactcctg gactcaggvt gatttggcca cctcaggccg cccaaagtgg tagggatat
110941 aggggattag caccaacgcc cgggccaatt cgatgtgcct cttttctaca tggtgaagta
111001 tgttggactt cactggagtg tctaatcaag atgcctccca aagaaaggtg ggccgcttgg
111061 tgttcatgtg gctaatcccc ctcttcttta tatattgcga gcacgtttgt gggttgacgc
111121 ggggccgtct ttaaaatnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
111181 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnaca
111241 tgcctgcagg tcgactctag aggatcccct tgatcctaag caagtaagaa agtagaagaa
111301 cataagctac attaggaaaa aagtgaatta accatttttt aaaaaaagaa caaatttcag
111361 aaaggcaggc tgagggaaag ttcatctact tcaaaacact cctagaacca gctttgaaca
111421 gaatagttcc cattttgcaa taccacccac ttagcaaaga aaatccaatt ctctaggcct
111481 catggtggaa agtaaaacta aggggaaaaa agaaagtaca aagataagga gagttcaaaa
111541 ggaagtaaaa tatccagaag agtcctttcc aatccagtac tcaactcaga ggcctcatgt
111601 actgatcaaa tcctagcctc cattttttc cacgtttct gcagcaaaac atgaaattct
111661 gccttcatgc tgaagctata agcttctgtt aatagttgaa tttttcaggg ccaggcacag
111721 tggctcacat ctataatccc agcactttgg gaggctgagg caggtagatc acaaggtcag
111781 gagttcaaga ccaacctggc caacatggtg aaaccctgtc tctactgaaa atacaaaaat
111841 tagccgggcg tggtggcgca cgctgtaatc ctagctactc cggaggctga ggcaggagaa
111901 ttgcttgaac ctgagaggca gaagttgcag tgagctgaga ttgtgccact gcactccagc
111961 ctggatgaca gagcgagact ccgtctcaga aaaaaattta aaaagacga aaataaatag
112021 ttttaatttt tcaaagtttg cacaggggttt atgtggcttt aagcaattac cataattggt
112081 gatttccttg tccttcatct gctttttaag tggaaggttt tcctattgaa aggtttggtg
112141 aaagggaaga aaagtgaagt ggtatttaaa gagggtgaag nnnnnnnnnn nnnnnnnnnn
112201 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
112261 nnnnnnnnnn nnnnnnnnnn tacttcctcc caggtcggag gccacgaaga tccccgttca
112321 tcttcggttg atcccccaga tcacgtttgt gcccattgga atttaagaag catggcttta
112381 ccctagctcg tggatcaaag tggggctcac atataccaag gagtgtcaca ttgtaagttg
112441 catttcttgc aattgggagg gattggcgtt gctgcagcaa cacaatcctc ctggacgttt
112501 ttggctggta ggggtacagt ctggtcacaa aacagaacaa ctctacagag tgagactttt
112561 gccccattag caaccatttt aagcaaacag ccacagactt ctcttccatt aaccttcttg
112621 gtaacctcac attttgtttt cctaactcta caagaaactt tggagaggca agttcagtta
112681 gattccttgc aaagacttcc tcgcagaaaa attaatgcaa agaataatgt tattctaaac
112741 cctccagagt ctgccaggaa ggagcagagg ggaggagtga gattgctgga gccagatctc
112801 tatgatgtgc taacttaatt cagaccacag gagctgcatc taaacttggc caatagttca
112861 cgagtgaaga atagacggaa aggatatgtg gtccaactta gaagttttca agaacaattt
112921 tgagatgctc cagcgattca ccattcacgc agacatttaa aagcatcgtg gggttgtgtg
112981 tatatccgat tttggtgtct gtaatggtgc caatcgattg ggattgcgtt ggaagagggc
113041 acaatcccag atgtgattgg ataagaattc cgtaggtgtt cagtgtgtga ttgggaatct
113101 gggggatagc aacgaagtgc cggttcggag gagagagaac gggttcggaa cgagtcgaag
113161 ttgaggatta ttaagaggca caggtgagac gttaatcgag atgctgtggg atgcgcagtt
113221 ggtataggca atgccgtgag tagccagtgn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
113281 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
113341 nnnnnnnnnc ccgtttactt gttcttttgt gagtgctttt ctggcttatt tttctgtttc
113401 gcgaaggctt gtagtcgctc ctcctgacag aagtgcagtc gtaaagtca gagctgtggc
113461 ttgtttaca attttttga tgtgcatgtt catgtctcct tctgtatgta ctgttttttg
113521 cgatctgccg tttcgatcct cccgaattga ctagtgggta ggcctggcgg cgcctggctg
113581 cagacattta ggtgacacta tagaaggatc cgcggaattc tagactccta ataccaccat
113641 gagagagagc cccagggcac ttccgacgct caagtttccc tgataaagaa tatgtctgtg
113701 tgaattgatg ctattgcagc atcttgtgta agccatctcc gcctcctgtt acagcttgtg
113761 ctttaggcct ctgggtctca aaatggggtc cactgaaccc ttggatagg atccccgact
113821 ttttaagggg tttatggcat taaactctat tcataataac atcacaacgt tatttgtctt
113881 tttcactgtg gctgccttgc atcgattggt gcatagaggt ggtgggtaga atggtgggct
113941 gcctcaggta cgattcaggt caattattgg tcatgcaatt gttgcttgca ggagagaaag
114001 gagtcctttg gagcctaatt aatgtccttg ttttagggaa gtaccaagtt agtttagagt
114061 gtgattagaa gatttagact tggagtgaca cctttgtttg gaccatatta ggagagccac
114121 tcgtgtacgc agtgttctaa ctatatgagc gggaggtggg gagtgagttg tccttggtgg
114181 gtgaatgcag ctcgtgtgta tctggtttgt tgttcgcggg tgtggaaacc ggggtgtttt
114241 gttgttgagt gggatcatcg tatgtttat tgtctttggg tggcctaatc gaatgtgtgt
```

```
114301 atggtgatga gctgagtggt atgtgccaga gatgtgctgg tctgctgtca tgacgannnn
114361 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
114421 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnatcg cctgcaggta gaatctagag
114481 gatccccact gtgcctagcc atgaaggact ttttaaacat aacatcatga aagaaagaaa
114541 aaatgaataa ggaattaaat gtgattttt tttaagtttt atagaaaaat cacttaaaaa
114601 ttgaaagtca gccaggcatg gtggctcacg cctataatcc cagcactctg ggaggccaag
114661 gcgggtggat catgagttca ggagttcaga accagcctgg ccaacatagt gaaaccccgt
114721 ctctactaaa aatacaaaaa ttagccgggt gtggtaacat gtgcctgtca tctcagctac
114781 tcaggaggct gaggtgggag aatcgcttga acctgggagg cgaaggttgc agtgagccaa
114841 gaccacacca ttgcactcca gcctggatga cagagtgaga ctctgtctca aaaaataaaa
114901 taaaaataaa aataaattaa aagtcaagta acaaattaca gaaaatgttt tcataaacat
114961 aacctataaa agaccaatgc ctttaatata aagagcacat acaattagta agaagaacac
115021 ttatactta atagaaaaat gacacaaggg cttagtcatt tcaatgaaga aactcaaatg
115081 ggcaacaaac ttgtatttca aaagttcaaa ccttactata aattacataa acacaggaaa
115141 tgacagtgga agctattttg gccaaccaca aatggaacaa agatttgtta aagttagtgg
115201 accatactgc agtgatacca gaaaggaggg aagaacctaa gctagtagga gagaacaaat
115261 tagactcatt cctaacggca agccagtttt agcactaatg tataaaaga acctcaaaag
115321 ctgattccat acccgtttga accactaact tcctcttcta aggaaattgt ttggaaaggg
115381 ccgagggtgg tggataggaa gggtatactt ttgatgannn nnnnnnnnnn nnnnnnnnnn
115441 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
115501 nnnnnnnnnn nnnnnncgc aggttttttt attttttta ttatcccatg attgagcaat
115561 gcttggctct ttccaccttgc caaggaaacc acttgagtgt aatttcagag ttttgggagt
115621 ttcattgctc catccgtttt gatctccatc acaagaagca ggactccaag ctgtacaggt
115681 taaggatgga tcccaagatg agttattgtc tctccaaagt ttgtactata atgaatatgc
115741 caaaattagc atggggagga acacaatgta cgtatatagg taatataaaa tgagcctgtg
115801 acccagttac agctttcata catttttcta aataatcgta tctggtagat taattggaat
115861 atggcagctc ccgtagcaag taggggggta atttccctct ggtgcatgtg tgctgaaaag
115921 catgggttta ctattctgaa cgtaagggac attaacaatc agcctagtca gtccaacacc
115981 aatagatctt tcattcttct ttaactgttc ttttcgattc ctctacatgt ctctgtttcc
116041 gcccctgact cctcgtcaat ggcttctggt taaaagaaag aagtgtcttt tctgttgtga
116101 gaatgctatg gctgctagtg agtgtgcctc ctttggcacac aaaaagcttc cccagatgag
116161 gtggatttgt cagcctagta gttccgctaa gtacatggtg cgtttgggag cttgaattgg
116221 ctcaagttcc gaatcccagt tttattaaag gtgtgtgcca tgtgcagatt aagtgctgta
116281 tggtcctgtc atctgtgtaa gatggtgaat atgcgtaggt ggtcttgcgt tattaagagt
116341 ttgtggtagt ggtggtgaag gtggtactta tagaagtggt acggtgtttt tagtggcaag
116401 gtcgttgaca gtggttaatg tcttgatgtg agctttgagc ctttatggat ggtcgcatcc
116461 gggttggtgc gtagtggtga tgtgatgggt gtgcatnnnn nnnnnnnnnn nnnnnnnnnn
116521 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
116581 nnnnnnnnnn nnnnnnaagc atgcctgctg tcgactcta gaggatcccc atgcatttgc
116641 tgcttcttct gccatgattg taagttgtcc tgaggcctcc ccgacactgc agacctgtga
116701 gtcaattaat cctctttcct ttataaatta cccagtcttg ggtagttttt ttgtagcagc
116761 atgagaatgg actaatacag gtaggtagaa atctttaatt ttatgaagga ttatgctagc
116821 cttgctggct tttggaaatt gaaaagtaag ttaagtgttg ttatgaaacc atccttcctc
116881 caatcttcct tactttcttc tgaatcaaat acatgactcc acctacctct cactttccag
116941 gaatggcagg tgttggagtc aggcatttgc cattttaact gccaactctg gaaaatgagg
117001 aattggtttg tttagtctgg agcagagctg aatgttcatg ttcagttgaa catgatagct
117061 gttttcaatt ttgacaaagc tggaagagag tttagacttg ttttctttttc tttgcttctt
117121 ttttcttctg agacagagtc tcactctgtt gcccaggata gagtgcagtg gcatgatctt
117181 ggctcactgc aagctccgct tcctgggtcc gaaccattct cctgcctcag cctcctgagt
117241 agttgggatg tacaggttgc tgccaccatg cccagctata tctttgtatt tttgagtaga
117301 gatgtgggtt tcaccataat gggtcaagct ggttcttgaa cttctggaac tcaagttgat
117361 gccacctggc ctcaggcctc ccttaagtgg ctcaggatta tagggttgtg aagcactggc
117421 cccttgggct agaactccgt tttcctttca attcctaagg gggtagtagc tagctttccg
117481 gttggggag aatgtaggga tttaataaga ccttgtggaa gtggcgaaag gccgtttcgg
117541 attactgagg ggcctttagn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
117601 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnc
117661 tcgactctag aggatcccc atacaaatag acagacgcca tacagatacc aaactgaacc
117721 gatggaatca gacacttgag tgtgcgcaat tgatgcagca ctctgattac ggactgggct
117781 ttgtggtcca ttggccctgg gtttcattaa ctgtccaggc tccctccaga gactcagggc
117841 atgttttgtt gctgtgggtg gtgctcttgc tctatcaaag ggaccgcaag agagcatgcg
```

```
117901 cttcagatga tgaccagtat aggtgctgaa ggacttctta tacaaaaga agcagctcct
117961 ggtgtttgtc accaaaagga tgagaaaaag agaaatgaaa atcaaccaca tatgcaacaa
118021 tgtcatatct tctcgactca ttttctgatc aaacgaaaat gaaaataaaa tccatgcact
118081 atacaatgac ttagaaatat ctaccagccc agaggagaag tagataaaga gtgataatat
118141 ttcaaaggag atggatgaga aatagatggc acttggtgga aagtcctgac aatacagcaa
118201 aggagaaact ggtcacttgt gtttaggaaa gggcaatgta ctgaggggcc ttggcatccc
118261 tgaggtgcaa tgcatgacag cagccagtgg gggtcagagg tgctccatgg cttagagcgc
118321 ctttaaccct cagcctgcat atgctgctca caggagacca gctggacctc ctttggagct
118381 ggtactttcc tccaggcaga gcagaactgt gaaaacatag gagggtggtt gatcttcatt
118441 gcttttacac aagctcactt tttgccttca agacaggttg gcggaatttt attttttgctt
118501 tcactgaatg ccctcccgtt tctcttgtgt ccagccaaaa cctctctgtt ggtcatggtg
118561 caggggcagtc tctctctggg ttagcctgtg gannnnnnnn nnnnnnnnnn nnnnnnnnnn
118621 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
118681 nnnnnnnnnn nngatgcctg caggtcgact ctagaggatc cctgggtctt cagaactctc
118741 gactctcttt tgtgccttca gctttcacca tagcaacatc tcttctggtc ccacgtgttc
118801 tttccagctg tgttccctct caaagcccac acacgcagga agcgacctgt agtaaagcca
118861 tttactacag aacacagagg ttcctgctaa agtctacata ttatgtaact gaagatactt
118921 gcattgtaag ctttgtcacg acttgtggaa agaaaagttt tgctgcgcct gaaagaatcc
118981 caaacctgag agagaaaaca gggaaaaaaa aaaaaaaaaa caggcgaggg gtcggcggga
119041 ggtgggggga tgggtagcct cagggcctca cccactcttc tgtattgttg ggggtgagga
119101 gggcctggcc gtgcaggttc ctctgaggaa atatgcctga cgaggctgag cggtgtgttt
119161 gcacacacct gtgtgggctg tggtccaccc tcttgcacag gtcgtttctc ttgtcgagtt
119221 gctggaaaaa gagaggaagg gctttgtctt ctagcccaga ttaatagagt gtgtgattgt
119281 ctctgtgctg ctgtaaccaa ttatcacaag ctgggtagct taaaacaaca gaaatttatc
119341 ctctcacagt tctggtgccc aaaagtctga aatcaagatg tcagcagcag gccgggtgca
119401 gtggctcatg cctgtaatcc cagcagcttg ggaaagcaag gtgggcagat cactaggatc
119461 atcagtttga gaccagcctg ggcaacatgg tgaaaccctgt ctctaggtaa aataaaaatt
119521 agctggatgt gtgtcatgcg cctgtagtcc agctactttg gaggctgagg cacaaaattt
119581 cttaactcag gaggcggagg tgccgtgacc aannnnnnnn nnnnnnnnnn nnnnnnnnnn
119641 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
119701 nnnnnnnnnn nnttcgactc tagagtatcc ccctattttt ctgttatgtt gatgtttttc
119761 ttattgaaac atattatatt taaatatgaa agatattaat tctttggcat atttgtggca
119821 aatagtttcc caagtgtata gcttactatt tattttatct cactgttggt gtattttttt
119881 aattagccat atatattgag aattggattt tgaaaaacga gaagtatact atatagtcag
119941 ctattcctgt cagagaaaaa gagattctac atgtttatct ttgttccagc caaaaacaat
120001 tttggcaaag gtttggggga ttgagagtgc atcagatctg agctgggctg ctcatttatg
120061 aagcattttg gaataacaaa taatgacact cagcatcggg ccaggcactt aatgagtgtt
120121 caatacctac ttcttaatca atggctgatg gatgagttgt tctaatacac cattctaact
120181 cagctgttgg gtttttttact aagagaaaaa taagaattct gatttggatt cctatttgtg
120241 catggtagcc atgaaatttc atacacagga gcccattgca tgcagacaga actacacgaa
120301 catttcttca agcatttaaa caggctgata tcctggtgta gactttatca ctgacaaaag
120361 ggaattcaga gatcaccata acaacccttg ttgccatcaa atattattaa ttagcctgat
120421 ggtggaaatc acttctgaca tatcttagtt tagcggagca aattagccaa acctttccta
120481 gtatgttagt ttttatcttg aatttagaac agaggaaagt attataacct aaggaccatt
120541 atggtgtgta gggatggcca taggattttt gtttttgtttg gttaactggg atgaaggtaa
120601 ggcataacct gtgttgatgt agagaggtag aggttaaatt cggatttagc gcgnnnnnnn
120661 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
120721 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnncttacat gcctgcaggt cgactctaga
120781 ggatccccac ctgaactcac tgtggggaaa agaaagagaa atcagactgt tactgtgtct
120841 atgtagaaag aagtaaacat aagagactcc attttgttct gtactaagaa aaattcttct
120901 gccttgagat gctgttaatc tgtaacccta cccccatccc tgtgctcgca gaaacatgtg
120961 ctgtgtcgac tcaaggttta atggatttag ggctatgcag gatgtgcttt gttaaacaaa
121021 tgcttgaagg cagcatgctt gttaaaagtc atcaccactc cctaatctca agtacccagg
121081 gacacaaaac actgtggaag gccacaggga cctctgccta ggaaagccag gaattgtcca
121141 aggtttctcc ccatgtgata gtctgaaata tggcctcatg gcaagagaaa gacctgaccg
121201 tccaccagcc cgacacatgt aaagggtctg tgctgaggag gattagtaaa acaggaaggc
121261 ctctttgcag ttgagataag aggaaggcat ctgtctcctg ctcctccctg ggcaatggaa
121321 tgtcttggtg taaaacccag ttgtatattc catctactga gataggagaa aaccgcctta
121381 gggctggaga tgagacacgc tggcggcaat actgctcttt aaggcattga gatgtttatg
121441 tatgtgcaca tcaaaagcac agcactttt tcttaacctt gtttatgata cagagacatt
```

```
121501  tgttcacatg  ttttcctgct  gaccctctcc  ccactattaa  cctattgtcc  tggcacatcc
121561  ccctctctga  gatggtagag  ataatgatca  ataaatactg  gaggaactca  gagaacggag
121621  gcggcgcgcg  tccctcataa  tgctgagcgc  cagtcccgtg  ggccaacttt  cttcttctat
121681  ccnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
121741  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnggcctgca  ggtcgactct
121801  agaggatccc  cagactgtgt  gctgatttac  tgtggtgaat  tgaagatccc  aggagtggtc
121861  taagggtaaa  gtcgatgggc  ccacaaccaa  agagcaagat  gccaaggctg  aaagaattct
121921  tttttttttt  aatcaactgt  tgttttgtg   tgaccttgtt  tacagggtta  gagatttctg
121981  aactctcttg  gagaaaggtc  cacttgttgc  tgcatagaac  aaatgggctg  agtaggtaaa
122041  taacaaccca  tcttcagaag  cttccgtgat  aaaagccaag  ccctggcctt  ggcaatatct
122101  agttcgcatc  acatcagttc  ctccggttat  atttcaccct  tttaacctct  ttctcctcct
122161  cctgggatgc  tggggccatt  ctttgctcca  agggcagact  gccatggaga  ctgaatcctc
122221  tctggaagag  gtggggctgt  cacactgagc  tgaggcctct  tagcagagct  cattccaaag
122281  ggaagcccag  cccagtggag  ccacagtgat  ggctgttgtc  cctgccagct  caccttgagc
122341  aaatcacaga  gggagtcggg  cactctgctg  aggactctag  ccaccatcac  cttttccttc
122401  tcgtgctagg  tgtcagaaag  gggttgattg  ggtggactgt  cagaatctag  aaagtatatc
122461  ttggtatgaa  gaggagtgtg  ggagggcttg  ggggtcagaa  gactgagttt  acatgacagc
122521  cttgttcttt  gtactgtgtg  tgcttgggca  agttatgtaa  actcagatgg  actaaaaatg
122581  ggatctgtct  caaagtctgt  gggcacgatt  aagtgatgat  ataggcagaa  agagcatagc
122641  acagtgcctg  gtacatgtga  actgcttata  acccagagtg  ataactcctt  ttttaattaa
122701  gagtactnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
122761  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnngtc  gactctagag
122821  gatcccctga  cttgccttag  atcaagccca  agtgtattaa  tgcaaactca  gatattcaga
122881  gttgagtagg  ttgttcttat  gattttgcca  aagtgcctct  taaaggataa  gaacagggat
122941  tcccggctgg  gtgcagtggc  tcacgtctgt  aatctcaaca  ctttgggagg  ccgagcgggg
123001  cagatcacga  ggtcaggagt  tcaagaccag  cctggccaac  atggtgaaaa  cccatctcta
123061  ctaagaatac  aaaaattagc  tgggcatggt  ggtgtgtgcc  tataatccca  gctactcggg
123121  aggctgaggc  aggagaattg  cttgaaccag  gacccgggag  gtggaggttg  cagtgagctg
123181  agatcgcacc  actgcactct  ggcctgggct  acagagtgag  actccatttc  agaaaacaaa
123241  acaaaactaa  acaacaacaa  caaaaaccca  gcgattccac  cctgtgaggg  cccagcgggg
123301  gtctgggaat  ctgttgtttt  acaagcactg  ctggtgattc  catcgcaagg  ccaggtctaa
123361  gacagcagct  ctacactggg  gtctggggat  ggtggaaggg  ggacgcatgt  cagtcagaat
123421  tacctgggga  ggtttttgca  aatgcacatg  catcctggat  ctaggaatc   agagtgcagt
123481  ggtgttgagg  tgactatgta  gaaagtgcct  gcttctggtg  ccactttcat  ctcagctgag
123541  aaccaacaca  tgaggaagct  tctggggagc  ccagccaggt  ttctctgtgg  ncaccgctac
123601  attggtgacc  ctgaccaagc  agaggcagcc  ccaggcattg  aagtctgggg  caaaactggc
123661  aacgattgtg  gccagcggt   gattaattct  gaagttttgt  aagaggttct  atgggcagtt
123721  gggatgacaa  acacnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
123781  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnncttcat
123841  gcctgcaggt  cgactctaga  ggatccccccc  gtacagtcat  agattggcag  tagttcccga
123901  atgactggat  tacaaaaatt  atgaaaacac  agataagaag  aaaatataaa  ctcaaaagtg
123961  atcattgaaa  ttttggtatg  ttgcatacac  ttgacttatg  ctgcaggatg  ggtttgcatc
124021  ctaccccacc  tcctttacgg  agccctgca   tcatgcaatg  gaggagtggg  gagaagtgtt
124081  agtggtaggt  gagctcagaa  gcctgaaggg  tctggttgtt  tcatggtgca  tagttgtgta
124141  cctctgctct  ttccatccct  cccacaaccc  ccaccagcag  aatctgaact  gtctcttgtt
124201  ccccattctg  cactccaaat  aagcatggct  gaaaatgggt  ggtgactaac  ccaaaggcca
124261  caagaaggac  aaggcaagtt  cctgaggaga  aggcaaagtg  gttgaaaggt  cctcacagct
124321  gcaaggccag  gaaacaaaga  acaggacgaa  gctctgaaag  gtgctactgc  ctgaggtggg
124381  tacagctctc  agggattagg  acagtggcag  gtagtgtctg  ccgaggtggc  agggctggtg
124441  gaacggctag  cagtgcaaat  cttaaatctc  ccacagtgtg  atcttcctat  gggctgggat
124501  acaatgatag  aacctggaga  aatgactgaa  agtctcgaag  atgcggtgtg  agtttggcta
124561  acaccaaagg  ccattttgtt  gctcacttac  taagtgaatc  gcccttctta  tctctcctcc
124621  ccttcgccct  tgggaggttc  cttccatgag  aatggactgg  gtcaaggatg  attattatta
124681  gcaagtaaca  actaactttt  tcaggggggct  ggaacaagga  tgggaacagg  ccctaacatc
124741  taggccaggt  tagatgactt  tgtgnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
124801  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
124861  nnnnatcgac  tctagaggat  cccctaagta  tgacacattt  gatttactaa  aggcttgagg
124921  caactagata  gatagataag  acaaacagag  agggagagag  agagagagac  agctagagtt
124981  attataaaga  attgacttat  gaagttatgg  aggctgagaa  gtcccacaat  ctgctgtctg
125041  caagctaaag  acccagaaaa  gacagtgata  gaatcctggc  acaagtccaa  agacctaaga
```

```
125101 ataaagggct gctggtataa gtcctagtac aagaacagga gaacactcat gtcttagctc
125161 aagcaatcag agacagagag aggtttcagc tttcctctgc cttttttgttg tattcaagct
125221 ttcgagattt tgcgtgattc cccccagcat tggggagggc aattttttc acagtctact
125281 gattcaaatg ttaatctcat ctagaaatgc actcacagac acacccagaa taatgtttgg
125341 ccaaatgtgt tggcatccca tggcccagtc aagttgacag ataaaattaa tcatcacatt
125401 tccacccctc atcaacttgg cacctataca cctctccata aaccatactt aatctccaga
125461 taggacaata accacatcat atatgcacct aacatgatac agccatccca catacaactg
125521 aaaacacact aactcctgtc ccggaagaac atgtanagtc cttaagtgat gcttactctt
125581 ctccttgatg tgctataact taaatgctat gtataaatta acaatatata agtactatga
125641 tataaagtca atacatctca tgtttgaata ataacagcgg aaagaaaaca gaaaataaac
125701 acaggcttgt ttttctttaa cacacacaca cacacacaca cacttgtgct tcttgcttta
125761 aatatataaa tcctctggat gtgtattagg tcattttcaa ctnnnnnnnn nnnnnnnnnn
125821 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
125881 nnnnnnnnnn nnnnnnnnnn nncatgcctg caggtcgact ctagaggatc ccctcacatc
125941 caggtcatgc tgatgcaaga ggtgggctcc catggccatg gcagctctac ccctgtggct
126001 ttacaggtta cagtcccccct cctgcctgct ttcatggact ggcattgagt gtttgtggct
126061 tttccaggca cgtggtgcaa gctggcagtg aatctatcat tctggggtct ggaggatggt
126121 ggccatcttc tctcagctcc actaggcagt gcccagtggg gactctgtgt gggagctctg
126181 accctacatt tcccttcttc attgccctag cagaggttct ccatgagagc tctgtctctg
126241 cacgcaactt ctgcctaggc atccagatat ttccatacat tctttgaaat ctaggtggag
126301 gttcccaaac ctcaatcctt gacttctgtg cacctgcagg tgaacgccac ttggaagctg
126361 ccaaggcttg catcctctga agcaatagcc tgagctgtac attggctcct tttagccatg
126421 gctaggacac agggcacaaa gccctgagac tgcacaaagc agcaaggccc tgtcctggcc
126481 ccaaaaacca ttttttcctc ctagatctcc aggcctgtga taggaggggc tgctgtgaag
126541 acctctgaca tgccctgaag acattttccc cattggtcta gcaattaaca tttggtgtct
126601 cattacttct gcaaatttgg gggtttcct tttccttgtt ttttagttt tggtttggtt
126661 ttgttgtttg gtttttggtt ttgagacaga ctctcactct ggtccccagg ctgtagtgca
126721 gtggcatgat ctcagctcac tgcaacctct tgcctcaggg ttcaagtgat tcttctgcct
126781 taagctcgca aaatagttgg cattacaggc atgtaccaac caaactgggt tnnnnnnnnn
126841 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
126901 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn naatgaaagg cggggaggtc gactctcacg
126961 aagtatcccc tgaacatata ttttttagct gtcagagtct ctaatggaaa gtaggtgcca
127021 aatgtttgtt ggttgagtaa ataagtgaat taatattaaa aggtaggaat tgtacgacca
127081 aagcaatatg aaagttgtct tatgggtata agaaatatgt acataaagca taaggcatat
127141 tgtataggga aagagttcat agtgttgctt catgaaatga ggtatgggta tagtataaat
127201 atacagttgg aaatttgaag cgacagatgg catcaatatt cagtagtgtt cttccaggat
127261 tttatacaag aatatggctc ttaatagaac agtgggactc ttaagtatat gggctatccg
127321 tataaaaagt gccaattagc tcatgaacat tgctcacaga tttttaaagg agtgaccttg
127381 gaagtagttt agaaacccct tgacttcaag gataacagca aggactcttg tgtcatatta
127441 tctacagttc tgttttaaat tgggaatatt gcttgagcag ccactgcttt ttcatcccca
127501 actgtgatgg tggcataaga aatcatccaa tctaggatca gggtatggaa ggagtatgca
127561 cggtgagaag tgagtgcggg aattggaggg ggtatgaggt gagcaggggg gtcacagaag
127621 tggtagacgg agaatagcgc tgtgaaccat gagagcaggt tcggattgtc gcgggagtgt
127681 ccgaaaacgt taaagcagct tgtttgggga accggagctc gcaagttcgt aaatacatga
127741 gttcataggc tagtgatcct cttgtgagaa ttaggaaagc cgggtcgaaa gtttccacat
127801 caagcttgag tgagtccggt gggcgtgtaa tgagtaaacg gtcagggtg tgtctagaat
127861 ggaaggtgac gctactgcat catgtactgt gcagtgtggg gagacgctgg tgcggattga
127921 ccgagtgtag gtgaagannn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
127981 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnctt
128041 tatgccagaa ggtggaggct agaggatccc aggactttgg gaggccgagg aaggcagatc
128101 acctgaggtc aggagttcaa gactagcctg gccaaaaggt gaaacctgtc tctacaaaaa
128161 tacgaaaatt agatggtcat gatgttgggc gtctgtaatc ccagctactt aggaggctga
128221 ggcaggagaa ctgcttgaac ccaggaggca gaggttgcag tgagccaaga ccatgccatt
128281 gcactccagc ctgggtgaca gagtgagact ccatctcaaa agacaaaaca aaacaaaaca
128341 aaaaaacact ggaacaaaca tgcttgccta gacttgttca ggagtggtca agaacaggaa
128401 aataagattc ttctcccatc tctctttctc tcttctccac tttcttgacc aagagaagga
128461 gaaggctaag cactttctca aaggcaacat ataatttgct tctagaccag tactggtttg
128521 catcttgtct ttatttatct ggtccttcag tctgaggatc aatcacagaa ttctcctcaa
128581 tgttcctggg tttactccag gactcccatt caagatctct ggagcctgaa atcagcgaac
128641 tgaggacaaa tgcattccct ttacctttcc catgctccta tggcttgagt tgtcaaaaac
```

```
128701 tccgtttacg aggacttctg tgggtctgaa agcaccaatg cgaaatttga cttattgatg
128761 acgtgtgtag cgcagtcagg ttggtcatag ccagatgtgt gaacgtgtgg gttgttacaa
128821 caaaagcaga ggatgcgtgt tggcgctgaa cagtacgcga tgttaggatg agggagtttg
128881 ggcatggacg acctgacaca attgcagggg taggttccga cgagtggcgc tgataagggg
128941 ttgtttcgag gtgctagaag tctcccatgt tgtagtggta tgaaaaagca gaggtgggtg
129001 tgtggcaatt tgccgagtag aggggggnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
129061 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
129121 nnnnnacgg gtgtgatgcc tgcaggtcga ctctagagga tcccctattc taagggctgc
129181 atgagaagag tctgccagca ggacaccatg tggtgccacc tttttaactc tgcccccatc
129241 tccctgtggc tccccaaggc aggaccctcc attgttctgc tggggctcac gggaagcagt
129301 tgtcctgggg actgcactgt gaagcttatc cctccctcct ggcaatgttc aaaattcaaga
129361 attaaagaaa aatgtcgcaa acgggacact tagaagttaa gtctcagcca caactctgaa
129421 ctcagtatac aaaaaaacct taccacagat gtgtcaaact caaataaaat atgtagagtt
129481 gaggccaggc acggtggctc acgcctgtaa tcccgctact ttgggaggcc aagaggctag
129541 aggatcacct gaggttggga gtttgagacc agcctgacca acatggagaa accctgtctc
129601 tactaaaaat acaaaattag tcgggcgtgg tggcgcatgc ctgtaattcc aggtactcgg
129661 gaggctgagg caggagaatc acctgaaccc aggaggaggc ggaagttgtg gtgagccaag
129721 atatatatat atatatatat catgctggag agagagagag agagcgagag agagagagag
129781 agagcgagag acgcgactct ctacatttca cgtagtattt gagatatgag gattggaggc
129841 gggcatggtg gctcacgcct gttatcccct ccctttgggg gggcgaggca ggtggattca
129901 cctgaggtcg agggtttctg aacagcctgg gcaacattgg tgagcccgt tctccacaaa
129961 aaatatcaaa tgtgaccagg ggtgggtggc ccatatttt ggtccccact tattgggaag
130021 ctggtgcagg agaattcatt tcacccaaga ggtgtagggt cttgtgaacc cnnnnnnnnn
130081 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
130141 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn ntgcctgcag gtcgactcta gaggatcccc
130201 ataacttaaa gtataatttt tacaaatttt aaaaaagaac taaaaaagaa acagtcagac
130261 aaatccaact gaggattatt ttgcccagta actggcccac atgctttaaa tatgttgatt
130321 tcataaaaga taaaaacagc tagggagtat tgtagattaa agaaatctaa agagacttga
130381 taaatacaat atttgattct acatttgtgc ctagattttt tttaaaaagc tataaaggac
130441 atctttgaaa agttatgaaa gacaactggg aacatttgaa tataaaatga ataataatat
130501 ccttagttaa atataatcct taaatttact cagtgccata tttacaatta tttataatat
130561 gactttgtat ttgaatgccc ttgttcatag gggaaatgca cacgaatggt taagcataaa
130621 ataccacgat gtctgcaaca aacttgaaag ctctcaaatg gttcagtcaa ataatgttga
130681 tgatgacgat aatacgctca cccccaacac acacgtagag agaggaacta taagaacatg
130741 tgttaaatgt ggaggcacgt gggagttcat tgcatttgcc tatcagcttt tccaaaaatg
130801 tttgacctgt ttgcaagcta agatcgggtg agagagaaaa tgggattatt ctggactaca
130861 catacttaac cctcatttcc agccactggt atatggtgag gccgtatgtt gactacgaag
130921 tggcatacac ccgcttctta gagaccaata tttttgaag gcagcgccga acactggacc
130981 ttgctttagt gtttcgataa ttgttatgga gttgacaggt ggttgattct ggtgaatggg
131041 ataattggtt ccttggtggt tattggatcg caggccttga tctgttaaac gtgcttaccg
131101 aggttatggc aggttccaca ttnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
131161 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
131221 nnacgactct agaggatccc attaacccaa aattggaagc acacctgtga acaattggct
131281 ggctgtacaa cagggaggga attaaggcta gtgttaatag cacaaatatt ctaaagtgag
131341 gttgaacaag ttcttttaaa acattaagat aaatatcaaa tggccaaggg acaaatagtt
131401 ctcatattga agcacagaaa aaaagtaaaa tttttaaaat ttattttcta agattagcat
131461 aaactggtaa agacacacac acacacacac acacacacac acacacacgt acctatagac
131521 caattcggtt tgtgaataca aaattgtaag ttttaaatta aattctactg gatcaatttc
131581 agttgggtat tgaaataaaa taatgcatca tggccaaata cagtttattc tagaatataa
131641 agatactttg gttggaggat atctattaat aaaatatgtc ataccaatag aacaaaggaa
131701 aaataagtga ttgtatgagc aaacaccaga aaggcattta tgaaatttga ccctataag
131761 ataaacagat aaaaagtgct tatctatttc aaaccagttg caaacattat acataatagt
131821 gaaacaatag aggaggggag agataagaca aattctaaca gatgcagtaa gatatggagc
131881 acgtagaaat ggaatgtaat attttttagg aagagcaaaa tgataataat ttattaatag
131941 cgaactttca cagacgaatt tgtcttcagg cactgtgcta acaattttat tggggagtag
132001 gccaattatt tgtgtttcag caacgttatg gaagtaggta gtatttcacc ccttccgctg
132061 ccatttaatg gtgtgagttt tggagcgcag gaaggtttca ccacgtttcc tgagtttgcc
132121 agctattgca tgggccggat tttgaaccag tccatcctgc ccgaagcagg agtnnnnnnn
132181 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
132241 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnggatgag tatgctgcag gtcgactcta
```

```
132301 gaggatcccc taggagctga caatctagca gtcactatca ggcatgttgc aacaaacacc
132361 cagatggccc tggtgacggg agaattctac tcttctgaaa atcaaaaagt attgattggc
132421 tcaaagagtg aggaggaaca catattcagt taaaaatata agctctccag aatgttttga
132481 ggggaaatgt taagtttttgg ttgacttggg atctgatttt agattgctga taagacaaaa
132541 tgtatgttct aactgttggg tgcatagtag ggttgctttg gaacagtgtc ttgtgttgat
132601 gagtaattct gcgccttgaa cctgtgccac cacaatttca gttaaaggct tacaagtcct
132661 atcagcttct cagaacattt ttttttttttt caaaaccact tttgtgtttt ctgaaccaga
132721 aatctgcttt agtgcttagc aggtttcatg tttcagaact gtacttttag agtgtctcta
132781 gacaacactg aaaggcacac agagagaaat gttgatgtgg ctgggtgctt ggtttgttcc
132841 ccgtcttggt tggcggttcg gggcggggtg gtggaggggg agggttaaga attatagcag
132901 gtgtctgctg gctgagaggt cagtaaacaa ttccagatgc tttgaaggat ctagaatttt
132961 caggcagctt ggctctggtt ggacatttaa aaattgagca tacttaaatc ctctaattca
133021 tatatgatca ccccccaaca aaagtgatag agggtctccc cttagataaa aaatttggga
133081 ttaataatgt actttaacag tagatctagt ttttaaaaac tagatgggtg ttacaggtac
133141 agtaatggaa ggcattttttc gttcattttt atttggaaaa ccatcttata catcggaaag
133201 ctaggtaaat taattcatnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
133261 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnntt
133321 ttatgccggc ggggtagagt caagaggatc ccatatttga atttcctcaa tcagatacaa
133381 gagggtcat atgtgaagct gatatgagga ttatatgagc tattctagtt tgcagtcctt
133441 aggacagagc ctggatctgc tagatgctcc ataaacattc gctcttgtca atatgtatcc
133501 atgtaaagcc ctgcacagag tctgcaccaa acagatgctc cccgcttccc ccacctctta
133561 cttgccaatt tttctcctaa cttaaatgag aatggatttt accaaaaacc gagtcacagt
133621 gttgcgtgct ttctgggatc tgacctcttc tcactccctg caatgggttg aatggtggcc
133681 ctaaagacat gttctaacct ctaatcctgg aacctgtggc tattccctta catggcaaga
133741 gagtgactat ggccttatat ctgaaaggat gtgactaagc caaggacttt gagaggagga
133801 gtttatcctg gattatcggg gtggtaccta aatgcaatgc acatgcatcc ttaaaggaga
133861 ggcagaggaa ctttgaaaca ggtacacaga ggagcgatgc acacaggcga ggcgaggtga
133921 gaatggtggg cagagaacag agtgatgagg gcaaaagcag cgcaagctgg aagagaccag
133981 gggaagattc ttttcctaaa ggttgctagg aagacggacg cccaacggaa ctatttattt
134041 tttctttttag aggtgaggag cctgattacg gtcaccacag gcctgggagt aacagtgggc
134101 ggcgattctt ggagtgcact ggaaaacgtc ggacatactt gaggtgaaag gaagagtctt
134161 ggtgggctca agacagtgcc caagaaagca tggggagtac agagggacat gaacgaccac
134221 aatgcacgag ctgaatatgt gttgatgttt aacgtcagag aaaagagggc ttcgagcaga
134281 gttagggcaa gaggttgggg tatcacagac acagttagat agaannnnnn nnnnnnnnnn
134341 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
134401 nnnnnnnnnn nnnnnnnnnn nnnnatgcct gcaggtcgac tctagaggat cccctagtac
134461 aaactgttgg agagacaata atatcttggg atccatcctt aaactgtaca gcttggagtc
134521 ctgcttcttg tgatggagat caaaacggat ggagcaatga actcccaaaa ctctgaaatt
134581 acactcagtg gtttccttgg caaggtgaaa gagccaagca ttgaccaatc atgggataat
134641 gacagaatat ggtcatacct catgtagcat ccagtttgag agaccccaat ttaccatttc
134701 ttgagaaaaa cccaattaca acatttttttg ataagaaagt tctctagaca gctctagaca
134761 gtgctagtga gaggtaaagc aggctaggct tctgggtcgg gtggggactt ggagaatttt
134821 tctgtctagc taaaggattg taaatgcacc aatcagcact ctgtgtctac ctaaaggctt
134881 gtaaacgcac caatcagcac tctgtcaaaa gagaccaatc agcactctgt caaacggacc
134941 aatcagcact ctgtaaaatg gaccaatcag ctctctgtaa aatggaccaa tcagcaggat
135001 gtgggtgggg ccaaataagg gaataaagca ggtcacctga tccagcagct gcaatgctgt
135061 tgggttcgct tccaaggtgt ggcagtcttg ttctttgttt cttcccagta gatcttgctg
135121 ctggtcacac tttgggatca cactggcctt ttgggctgta acactcaact ggaaggtctg
135181 caagctcact catgaagcca gtgagaacac aaacccagcc ggaggaatga atctgtacac
135241 tcactgcgta ggtcggtggc tcactctgaa gttcgcgagc cacaagccgg cagaaggaag
135301 aactcgggca cgtctgaaca tcggaggacc aaatcgggga acaacacttn nnnnnnnnnn
135361 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
135421 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnc taatgcaata agacaagaac aggaaataaa
135481 aagaatgctg attgggaagg aagaaataaa accgtctgtt ttcagatcac atgactatct
135541 atgtataaaa tctgaaagaa tagacaaaaa tagctctgaa actaagaagc aattatagca
135601 agatttcagg atacaggcta atatacaaaa gttgatcatt tttctatata ctagcaatga
135661 gcaaatagaa tttgaaatta aaaatacaat accatttaca ttagcacccc ccaaaattaa
135721 atagttaggt acaaatctaa caaaatgtga tacaagagct atatgaaaaa atctataaaa
135781 gtgtgatgaa aaacatcaaa gaactaaata aatggagatc tacatatggt aagggtaaga
135841 gcaaaataaa aattataaaa ataaataaat aaatggatat tgcatgttca tggttaagaa
```

```
135901  gacttaaaat  tgttaagata  tcagttcttc  aaaatttgat  ctatagattc  aatatagtcc
135961  ctatcgaaat  accagaaact  tatcttgtag  atgtcaacaa  actgattcca  cagtttatat
136021  ggagaggcaa  aagacaccga  atagtcaaca  agatagtgga  gaacaaagtt  gggtgactga
136081  cactactcaa  cttttgagact  tactataaag  ctacagtaat  ccagatagtg  tgatgctggc
136141  aaaataatag  acaagtaagg  tcatgcaaca  gcatgggacg  ccgggaaata  gacgcccata
136201  atcagctgat  ttttggacaa  aggagtagaa  gccataccat  gaaggagagg  gggtttggtt
136261  gcacaaattg  gtgctgggac  acatggggca  tctgcctggc  aaaacagtaa  ccttgggcgc
136321  cggacgtatt  cgcttgccac  aatttggctc  gtgactgatt  ccagaactga  aatgtgtaag
136381  cgtnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
136441  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnntcgact  ctagaggatc
136501  cccaagcaat  aaagaagtat  caagtaatct  ctttactgat  aatactgatc  aggatagtaa
136561  tagtggcagt  gtattgagtg  tttactctgt  tccaacgact  gtgctaaatg  ctttatataa
136621  atcatgttgt  tgaatcctca  aaacaacttt  attaagtagg  tactataatt  attgccactt
136681  tagggtaag  gaaacgaacc  cacataaagt  ttaaatcatt  tgccaggatt  ttattccagg
136741  ctgtccgaca  ccaaagacca  tgcctttaaa  tatccagcaa  tctgtaatgc  ctcataagag
136801  caaagggagt  tcaaagtggg  gagatcagca  tgggatggat  gagaccttca  cggaagaggg
136861  atcctggaga  tgtagatgtg  gtttggggta  aagagaggat  ggagaagacc  ttccaaggaa
136921  ggagggagaa  ggagagggag  agcacacaca  ggctgagaag  tgaaaatgca  caaagctcat
136981  tggggtccca  gagttaccct  gctgccactg  cacacccttt  ttgcatggat  gttagtgggt
137041  ggataatggt  ggtcaggtga  cagaagcaca  tggaagttag  gattatggaa  gggcctcctt
137101  gaaaaaagcc  ttcagaaatg  agagggaaat  aaaaacaatt  gaaaccaaaa  cagagttgat
137161  gaggtggacc  taattaaact  agagagcttt  tacacagcaa  gagaaactat  caacagggta
137221  aatagacaat  ctaggggaac  gggagaaaat  atttgcaaac  tatggctctt  gaaaaagtct
137281  aatattcaga  ctctgtaagg  gaattaaact  aatgcacagg  cagagagcaa  attaactcat
137341  tagaaattgg  gcaaggacct  catcaggcac  ttctcagaag  acttgcaagt  gggcaacaaa
137401  catattgagg  gatgctcatc  tgnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
137461  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
137521  nnacttacat  gcctgcaggt  cgagtctaga  ggatccccat  ttggagagca  tatatgtatg
137581  tatattgtgt  ggccccagaa  ttaccaggta  cagattgtat  cttctgtcaa  ttaaacacct
137641  ttttcctgtt  atgctagaag  cagcaatttt  ataacacgta  ataggccat  gtatttttca
137701  acacagtgat  caatcacact  gcatatttga  atgtggcaga  tgtgattagt  tccattctat
137761  gtgagagagg  tctccaggag  acatttattc  tgaaacagga  cgggtccccca  gcagattatg
137821  tcctcccatt  tagacagtgt  attgccaata  aattcagcag  atggagggct  ggatgttgat
137881  ctagtcaggc  ttaccaacat  gtgatgattc  actcagaagc  tttgtgaaat  actccttcat
137941  gacaattact  aagaccgact  gtttaaattc  ctctgaccat  caacatggaa  gcgatccaga
138001  agaacagggt  tttgctgagt  aacgagggga  gcatatagat  aatctctaat  atactcatgt
138061  ccttggggcc  agtctgtggt  acctaatttc  aagttgtcta  aacgttagct  ccttcttatc
138121  tctaagcttc  aggatgtcct  gcaaacacag  ccaatctgcc  tcagctgtca  cagcaggggg
138181  ctaaagggca  gggccatgat  tcagaaggaa  ttcagcagag  acaagagtgg  gcggatgtgg
138241  tggccgctga  atggcaggag  ataatggggt  caaggatgca  gcgttggttg  agctatcagt
138301  gactgaggaa  tgattaatga  aacatgtaaa  cattccccag  agaattccca  gaatacacag
138361  agagcaggac  ttggtaacag  actttctctc  tgaagacaag  taaactgcat  attaaggcgg
138421  actggtgact  catagactga  tgagattgga  acnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
138481  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn  nnnnnnnnnn
138541  nnnnnnnnnn  nnngtcctgc  aggtcggcgc  tggaggatcc  ccccacagca  cggaagtctt
138601  tattttcttc  tgaactcata  aaaaatactt  ttagacaacg  ctgggcccat  gtagctttga
138661  catgtttggc  cttttttctgt  aggttttgag  agcctgtcat  aacccagcaa  agaattttaa
138721  cttgctaata  gaggttttca  gcgatgtctg  tgttctcatc  tttacgttgg  ctagaatctg
138781  cattgaagtt  catttgtcct  cctagatgat  tctgtccatt  atcatctgaa  tgcctcgcat
138841  gaggatcatt  atgaagaaca  ttagtctggg  tgtcaccctc  ttctcccaac  aaaatactaa
138901  gtagctgaga  aaataaaata  aaccctattg  ccgatccata  gaggaaggtt  aaaaaattca
138961  gccaggattt  agaggccatc  tcggaaagtg  tatttctgtc  atcggccgtg  gctccctctt
139021  gcccctcctg  ggggcagtag  agggcgacga  catgggaccg  gcgactttttg  cttctctggg
139081  cacccgcaga  atgtggctcc  tggtcgctag  ccgaggccgc  caactgccgc  ccagatcagt
139141  ctccggcagc  agcggcagag  ttttaaataa  aatataatct  gcgtgtcttc  acatgcttct
139201  ttcttcctat  ttcttcatgt  ttcgtccatt  ttctaccctc  agagtctctc  accctgtgtg
139261  tatgctggga  tgctctcttt  atgcacccgt  acagaagtct  atctgttgta  aagcagtgag
139321  agaggcaaga  cagtcaaaac  atgctcctca  tgtaagcagt  gtgggaagaa  catagatgtc
139381  aatagattag  aagagagaga  gagtagggag  agcattggga  ggagacaagg  aaggactgag
139441  ggtattgttt  gtttatgtag  aactttaaga  acacttaata  gtggggtnnn  nnnnnnnnnn
```

```
139501 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
139561 nnnnnnnnnn nnnnnnnnnn nnnnnnnnacg actccgcaga atcacctgta taaattaaca
139621 atatataagt actatgatat aaagtcaata catctcatgt tgaataataa aagcggaaag
139681 gaaaacaaaa aaataaaaaa agctttgttt tcgttaaaga cacacacaca cacacacaca
139741 ctttttctttc ttctttataa tatatatatc actatgtatg tgtattagtc cattttcata
139801 ctgctataaa gaactgccca agactgatta atttataaag gaaagggtt taattgactc
139861 agttcagcat agctggggag gcctcaggaa acttacaatg atggcagaag gcaaagggga
139921 agcaaggcac cttcttctta aggcaggcag gaaggagaag tgctgagcaa acaggaaaga
139981 acctcttata aaacacatca gggctgggca atagtggctc acgcctataa tcccagcact
140041 ttgggagtcc aaggcatgta gatcacgagg tcaggagatt gagaacagac tgaccaacgt
140101 gctggaaccc catctctact agaaatagca aaaagaagat tggctgggca tggtggcaca
140161 cacctgtaat cccagctact caggaggcca aggcaggaga atcacttgta cctggtgggt
140221 cggaaggttg cagtgatcaa agtattgtgg ccaccgccct ccaggcttgt gtgggcatag
140281 gtgacattct gtctaatcac agaccaaaaa aatcaggatg ttgtgatgcg tctgcactca
140341 cctagtctga gtgtaacagc attgtggggg tactaatgcg ccatgatgta agattaacat
140401 gtctttgagc agatgtggga attgagaggg gatttgtagt tacaagagtg gtgtttttgag
140461 ggtgggggtga acaaaatcca ggaccattat cattatccaa acattgtaga cctcgccgaa
140521 tactcgaatt gcgttgaatt gttatgagaa tcactgaaat gctttccaaa ggggtgcccc
140581 aaggtgttgg nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
140641 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn tagaggatcc
140701 tcgaacaata tcagtaggaa aggtgtctaa atataatttt tgattaagag ccaaataggg
140761 caacaaatgt tgaaatggtc aaaaaatctc tataaaggac atatattttg agctatcaga
140821 gtctctaatg cagagtaggt gccaaatgtt tgtttgttga gtaaataagt gaattaatat
140881 taaaaggtag gaattgtacg accaaagcaa tatgaaagtt gtcttatggg tataacaaat
140941 atgtacataa agcataaggc atattttata gggaaagagt tcatagtgtt gcttcatgaa
141001 atgaggtatg ggtatagtat aaataacagt tggaaatttg aagcgacaga tggcatcaat
141061 attcagtagt gttcttccag gattttatac aagaatatgg ctcttagtaa aacagtggga
141121 ctcttaagta tatgggctat ccttagaaaa agtccaaatt agctcatgaa cattgctcac
141181 agattttttat aggaatgacc ttggaagtag gttagaaacc ccttgacttc aaggataaca
141241 gcaaggactc ttttgtcata ttatctacag ttctgtttta aattggtaat agtcttgagc
141301 agccactgct tttttcatcc ccaactgtga tgggtctcat aagaaacatc caatcatgga
141361 tcagggtagg gaaggagtat caaggtgaga agtggtctgg gattggaggg gtaagatgtg
141421 agcaggaagg cttatagtgg tgagggata agcctgtgac caagaagcgg ctctaatttc
141481 acagggacac tgacacatta tgctactttt ttgttgagta cccaaagagg tggggtgctt
141541 ggatgttggt ggattggctt ggatttaata gcctaggata acatttatgg tatggatgga
141601 acatgnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
141661 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnncttct ggtcgactct
141721 agaggatccc catggaggtt tcagctcttg attcagctcc accacttgtt gaaaagaaac
141781 cctgccaaga tgcaaagggg agtagttata aaatatcaag cagacctgcc ttgggtggca
141841 cacacagaca cacacatacc cctctcattc tctctgtttc tctctccatc tcaatgtttg
141901 ctaccggctt actgtgtccc agagtaaacc ttcaaagaat tgctgggaaa atgccttcaa
141961 agtctttgaa ccatgactct ctgactctct tcttgcttcc aaatcctccc cagcagagtc
142021 atttcaggtg atcctgaatt ctacacccga cagtgaaagt agtggctcat gaccctgcat
142081 cactatcaca taagggagtc cacgtcaata cacacaacca aacaaatcag aataggctca
142141 agaaatctat tgtccagaga gggcaaaacc aagagtaagg tgaaagaata ataatcacta
142201 atgtgtaacc gagtgctttc tattttcaag gggaatgatt aactaaaagt tatctattcc
142261 ttttttcaag gagagcatcc tttgcataaa cttgccagcc cgtctctgtc ttcagcacag
142321 acaaccccac agttgatttc tgttggccca gaaagagcac cttgtctgag ctactgccag
142381 gaccctgtga gaatagtttt ctgctgccct ggactgtggt ttcagtcaac attttcatgt
142441 tgccaagtac agcagaagtg gggacccggg gactttcagg atttgactgt tttcctgtat
142501 gtgagggggga aaccaaagtg gttctggaaa acggctttt ttttccatcc ccctaacctg
142561 gggtttcatt ttctcggcac cagtttctcg gcaaaaacta agagagggaa aaggttttt
142621 ttcgtatttg cacgggggcaa agcccccgtc ttnnnnnnnn nnnnnnnnnn nnnnnnnnnn
142681 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
142741 nnnnnnnnnn nnatgcctgc aggtcgactc tagaggatcc ccccctttag aattagaagg
142801 aatcttagtg aaatatataac ccagcacctt cactgtttat atgtgaagac tgaaacataa
142861 agggattagc agtggtacag tggagtaaat cccatggcca ctggagctga ttggacactc
142921 agatcccagt gctgctgctt actgtgtgct ccagctggtg atatatttat cccttgcttt
142981 ccttaccttg taagttaaga tgattatact acaaaagatt gtttgaaact gttggtgtgg
143041 gttataggat cgttgtaaag atgattacaa ccatcctcag aggactgtta taaagattta
```

```
143101 atgaagtaat gcatacaaag tacctggcac cacgccgggc ccacagaatc acttagtaag
143161 tgctagtgat tattataaat gactcaccta aggtcacatg gatgactggt ctccccaggt
143221 caagtgaaca tcccacactc caagccttca cttcctctct aatgaattcg tggcagagca
143281 ccctgatatt gtttggctgt gccccaccca aatctcactt tgaattgtaa taatgcccat
143341 gtgtcaagag cagggccagg tggagataat tgaatccctg gggtggtttc cccatactgt
143401 tcttgtggta gtgaataaga ctcacaagat ctgatggtct tataaatggg agttcccctg
143461 cacagctctc ttgcctggca ccatgtaaga tgtgactctg gctctccttt gacttttcac
143521 atggatgttg agggctccct aagcatgtgg gtggggtcat caaacatctt tgctttataa
143581 atttagcagg ctcagatatg tctttattag caactgagaa cagactaata ccaactcttg
143641 ttcattggaa gttggaaggg caggattgcc tgggcggta annnnnnnnn nnnnnnnnnn
143701 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
143761 nnnnnnnnnn nnnnnnnnnn natcttgcaa gcctgcaggt tgactctaga ggatcccctt
143821 ttcaacaagt ggtggagctg aatcaagagc tgaaacctcc atctttaaag tttgacctac
143881 tcagaaaatt gttaacactg ctttccacca tttaaacctg agaccagtcc acaggtcaat
143941 ttctcacctg gactgcccag tggagagcgg ttttaaagtc tttatccaca agggtggggt
144001 ctgccccctt cttcagcagc atttgtgtgt gttgaggctg gttgtggaaa gccgcccagt
144061 ggagtggtgt cattccctgc aaaacaacag tcagagagga cagagatgag cacaggctcc
144121 caggaagaaa actggagctc acactttctc ctcaggcctg ggggcactca ccagatgcgt
144181 tggttgtttc ctgctggttc attcattcat tcattaatcc attcattcca tagatgttta
144241 ttgtctgtct gctttgtgcc aggcaagcag ttgttcagga tacaaagtt aataaggtaa
144301 atgagatcct taccctcatg gaaattgctc tgtggtaaag gaaggcagat attaaatgca
144361 caaaaacatg tcaaacaatc ttccagattg ataaatacta tgaagaatgc acgtaggatg
144421 ctggtgagag agtaaccaag ggtggaggga ctgttctaaa caggcctctg aaagaagaaa
144481 tggaggaaga ggacagccaa caccaagcac agaggcagag agtaagttaa agggaaggcc
144541 tctgtgactg gagtgtcaat ccccaccacc agggcagggg tgctgtctgt tttctctatc
144601 tctaattgct aggctaaagg ctggagaaat agctgttgaa tgaatgaatg aggtaggagg
144661 ggagagagca tgtgtaatta ggttgaagag gaggcagggc tgatctggga gggtnnnnnn
144721 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
144781 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnntgcaat acattgcaca tgggaatgag
144841 actctagatg ttcctttttgt ctccattcta gtctaacatg tctggctcca accgaggagc
144901 caggatcatc ttctcacatc acaaaaacct cccagctttt taggagggat aagcggctgc
144961 aacacagagg ctaaagcact ggcctcggct ttatatggtc accatcacaa gacaagcaat
145021 gcaaaacaca tcccagtgtt gcaagagaag gaaggagatt ggagttcctg ccaagaagaa
145081 accaccatag aacatattcc ttagacatat gttagcaaat aagcaactag tcttaaatcg
145141 cccactagac tcctttgaag gtcacctaga atgtctacag ttaggatatt gagctcttat
145201 tgttgttgtt gttgtttat cactctgcgc gtaggcagaa ttagtacaca ttaactcgac
145261 tttcttcatg gcaagtcttc ttatgagtca ggcttcccca actctcccca ctcatgtcag
145321 gtaaagagaa aacgtctagg actcagttcc caatcagtgt tcaggaatac atgaaggcaa
145381 tgttattgga gtatctctgg aatcaaaacg tatcaattct acagaaacga agctctcaat
145441 catgcatctg gtcagctccg tggtagaatt ctagaggctc ctgttagaat agggttatgt
145501 aaaatgacta gtttctttcc ctgttttaat gaacatattc gaagccattg ggaagacgtt
145561 ctctcggttt cttggcttag gaggtggcct gagaccagag gtgtcgattt tcttacgtgt
145621 gtctagtgtg tccgtgagtg tgctgttgaa ttggacctat cctaccccag ggcggatatg
145681 cttatgtttt ttggggtgga cgacccagta ctaggattg gtgtagaaag gggtatactg
145741 ttgcacccag gagagcaatt gtgattctag gnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
145801 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
145861 nnnnnnnnnn ncgactccag aggatcccca gggtacattt cataagggca gggtctttgt
145921 ctactctttc tttgtctgct ttgtccactc catgtcctta cagcctagca cagagagggg
145981 cacaaaggag gtgctcagta catttcagtg catgagtgaa acttcactga agaactttcc
146041 ttgctcaagc tgacaacctg ctcactgaca ttgtaacatt ggaacccaat taaccatcct
146101 tcatggggta agaactttct gacaagaact tctgtagtcc ttgaaatttt ctagtctaaa
146161 caagaaacca tgtacttgag gattggttct agggtttctg gaattggctc tcaaatctga
146221 ttaaatttaa ggattctaat agctttattt ctaggagtaa agagagcatt gatagtccat
146281 ggtgtgaagt ggtaatagag atatgcaaaa agctgcatct gaatattcct aattaatcac
146341 tggacacaac aggcaaggag ttgggtgact gtgtagatga taccctcaaa cattttggaa
146401 aacttaatga atatggctgg ttgctcctaa tgtcactgga caaagtgatg aaagaaaagg
146461 attagctcac ggattctaat tcccagctca ggtgccatat agatgacctg gaggtgtgta
146521 tgtgtaccct gaaggagagt cttacctcct gtagccatga ggctgaggat gctgcaatca
146581 tatgcaggct ctcatgctgc agctgcctgg attagcatgc gaattgaact ctgaattaca
146641 gcgcaagtca aactccatct tcacaggatg gtcgctgtta aagtgaggac atggattggt
```

```
146701 atagaaggga gacctttatt tggatggtgc atgtgggaag gcctgaagat gctgggggca
146761 ctgagcttct aactctgagg tgtcttcttg tcaatggann nnnnnnnnnn nnnnnnnnnn
146821 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
146881 nnnnnnnnnn nnnnnnnnat cttgcatgcc ttcaggtcga ctctagagga tccccaggag
146941 ctattaaaaa attaatcatt ttatagaatt ttttgtttgt tttttgtttg ttttgagaca
147001 gagtctcaag ctctgatgcc caggctagag tgcagtggca taatctcggc tcactgcaac
147061 ctccacctcc cagattgaag caattctccg acctcagcct ccctaggtag ctggaattac
147121 agggtgccca ccatcatgcc tggcttaatt ttctatttct aattacagac ggggtttcac
147181 catgttagcc aggctggtct caaactcttg acttcaggtg atctgcccac ttggtctccc
147241 aaagtgctgg gattacaggc aggcgtgacg agcgcacctg gccatataaa actttattat
147301 ggcatgtaag ggctattcca aagtaggctt tccacactga gtcaaagtca tgacagatcc
147361 tgcggaagtt agccagtaaa actgcatttt atggataaga aaattgtagc cactgggagc
147421 tcgcccaagg tcactggctg gttggtatgg agcagggatt ctaacagtgg cagtctgggc
147481 ccagcatcag tgctcttatg actcaacaca ccacctgtct gggactgctc ttgctggggt
147541 gcaagcctgc tgtcctggca cctgagatga gatgggtctt acatcactta ctcagagatc
147601 cgaggacagg agggaggtct gacttggctg atggggtgt agaatgactc ctgggtcatg
147661 gtaacacaaa atgagaagct cggggaagca caacagaggg ctgcaatcat ctaggaattg
147721 acatagatgc tgggacagta tctcgcaggt caacttcata ccacagaaca ggcagggaag
147781 tcccaggctt ggcaatgaga caactggttt tctgggttca ggctgtatca ctgagacann
147841 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
147901 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnca tgctgcagtt tgtctctgga
147961 ggttcccttc ccattgctat gttttatcca cctgtaaagt cctcaagatt ctttacgtga
148021 actgctgaaa cctgctgtct acagttgtct agattgagac ctgatatggc cacatctcat
148081 gcttgtctcc tcctcggtca acatttactg ctgggtcatc ttctcattgt ctttcccatt
148141 tcaaagggca ggtataactt caggctagcc ctccctccca tgctacttta actgacccat
148201 acctattgat aaccaagttt ggctcgcatg ttaagaggat gtctcctcag gtgatctaga
148261 actgcttggg ttacttgccc cattgtaaag tatacttaaa aatagatgga attattatta
148321 tgaagaataa taggataacc ctctatttgg ttcagaagca ggcttcccac cttcctacat
148381 tcgcgtctag gtaacctcga aattttttccg gtaaattggg aaagatgact gaagattttc
148441 ctcctttttac gggaagccat aaaaattcct gatggttgtg tgtggagcag gggtttctaa
148501 cagtgggagt gctggccctc cgcaggcgtg cttttgattg gatcaccagg tacaggcaga
148561 tctgggagca tcctcgtgct aacaagggtg gaaaccccca tctctggcca caaataataa
148621 agaattggct tggggattgg ttggctgggg tgctgttagt gcccacgcca cttcgggtag
148681 ggcttttggc atggttgggg ggtgttgtat cccggttgtc tgtacttgga tatataaacc
148741 cttattttgt tcggggtggg gggccaacct tgggggggtag gaaacgagtt tttggttttc
148801 tcgggagaaa aaaagagat gcctagtggt tttttcttg cctttgggga gaagggcagt
148861 gtgaggttta ctgagaagct acctttggt gtttgttgag tttctggggg gtgaatcctc
148921 ctatgatgcg tgcgagannn nnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
148981 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnctg
149041 ctggtggact ctagaggtcc ccctctctcc ccctgcggat ttatcctgaa tgctttgaag
149101 aaactgcatt cttaggggta cccagaatga cctatccaca aagtggcgtc tttccacctt
149161 taaggagcat gccaggcctt acactgcacc acgatggctt catgggacaa cattgccacc
149221 cactggtaat aaagagtctc tgtggacctt cacctgggcc ctgagtcaat ctggaactct
149281 ttggccatgc aagaacaagt taaaggtcat tgatacagct ggctggcatt gaaacaaaat
149341 tagtctcatg tgacttttt caaatatatc aggtgacaca aagcatacat atagaaaaat
149401 ggtaagagca caagctctgg ggcctcacct ctagagtctg attctggcac tgcacttacc
149461 tgctagctat gtgaccttag gcaagttgct taacatctct atgtccgttc ttcacttgcc
149521 aaatggataa gaatagtgcc tccccttag tgctgttctg agagctaaat gaattaattc
149581 atatgaagtg cttaaagcag tgcctggccc agagtaaata ttcaaagtgt gttaattagt
149641 ggggtgattc ctcaaagacc aagaggcaga aataccattt gacccagcaa tcccattact
149701 aggtatatac cccaaggaat ataaatcatt ctattataaa gatacttgca ttgctatcac
149761 aatagcagca ctattcactg ttgagcaaaa catggatcc aacctaaatg cccatcagtg
149821 attaactggg attgggaaat tgtgatacat atggcacagg gaatactatg cagcaaataa
149881 aaaggacgag gtcatgtctc ttgcagggac atggattggg ttggcaggca ttatctcagc
149941 caactaatgc gaggaccgaa aacgaacgac acgtgtgctc attgtnnnnn nnnnnnnnnn
150001 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
150061 nnnnnnnnnn nnnnnnnnnn nnnncttct tcaggcgagg aggcggacca tagatgatac
150121 cgtttatttc aagataattt tgacctctga attcctctgg ttatgtgtct tgagaagagg
150181 tcccagtatt cagagagtca taaactatat tagagcaaga agttatctta atcatcttca
150241 agtttacaca gagacctaga gagctgctaa ttgtcccaat catcatcaga gaaaggaatt
```
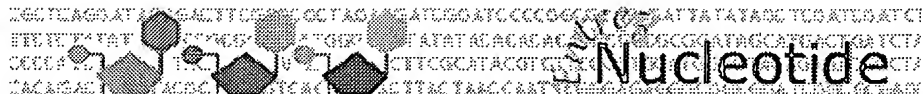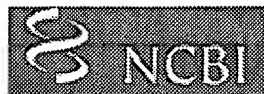
```
150301 ttcttttatg tgtaagaaga aaattatgga ggtttgaatt atcatttggc tggttaaggc
150361 gacactccca ttgcatgaat gcagtgtcaa caattgaatg acatcaagag atgggaggtt
150421 tcctttacac gctctcccaa aggatgtgtt cacatgtggt tctttcagat aacagttttg
150481 aaatgttgag tgacacccag cacattttct atttgatttc acaatctttt tgtaagacag
150541 aattaaaaaa aaatctattt ccttcccgct ggaaatagag caagcagatt tacatgaagc
150601 tggtgaaagc gagaattaag attttgtgca aaccatggta tggaatagtt ggttctacgt
150661 tagtgctaaa caattggtgt ttagtcacct ttgggcccct aaaaggtgac cattgttgtg
150721 gtgatgtgat gagacccagg cctgtgtggt tttcttgggt gtgaatgggg ggactgaagt
150781 ctttccttgg tgccttagta tgttcctatg ttggcctagt ggatagagtc gggatggttt
150841 gaaggtattt cgaggtagtc aatatggtgg cagccgttta tgttgaggtt taagatggga
150901 attacgttgc ggtcttggtg gtaagtgttt taagcgtgca gagggaggtg tagtgatacg
150961 tgagcaagag cccgacttac ctcgccccag ggatgaggag aatacgtgtc gggagtgcgc
151021 aacgttggag atagtgggtg aatgtaaagt gtaggatctc tagttgtgca gacaaggggg
151081 atttgtgagt gagggattnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
151141 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnntg
151201 tacgtctaga ggatccccaa aacaagaacg caatcccatt cacaacagcc atacacatac
151261 acacacacat acatatacac acacacagac acacacatac gcaataccta ggaatacagc
151321 taaccaggga ggtgaaagag ctctataatg agaattatct ttcaaacaga ttcttttatt
151381 attcttttct gaaagaaatc agagatgata caaacaaatg aaaaaacatt ccatgcttgt
151441 ggataagaag gaatcaatat tgttaaaatg gccatactgc ccaaaccaat ttacagattg
151501 aatggtatgc ctatcaactt atcaatgaca tttttcacag aattagagaa aaattagaaa
151561 aatttttaga attagaaaaa aacgattcta aaatttatat gaaaccaaaa gagcctgaat
151621 agccaaagca atcctaagca aaaacaacaa agctgaaggc gtcacattac ccaacttcaa
151681 actatactac aaggttacag taaccaaaac agcatggtac tggtaccaaa acagacacat
151741 agaccaatgg aacagaatag agagcccaca aataatgctg cacacctaca accatctgat
151801 cttcaacaaa gttgacaaaa acaaggaatg gagaaaggac tccctgttca ataaatggtg
151861 gtgggataac tggctagcaa tgtgcagaag attggaactg gaccccttcc ttacaccatg
151921 tacaaaaatt cactcaagat ggattataga ctttaaagta aaacttaaaa ctattaaaaa
151981 ttcctggaag attacctggg aaataacatt ctggacatag gacctgacaa atatgcctct
152041 gcctatgttg tcttttctga caaagacacc aaagcatttg accattgggt actaatttaa
152101 tgaaagagct cctgcatgcg aaagaaactg tcaaccgggt gtacaggnnn nnnnnnnnnn
152161 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
152221 nnnnnnnnnn nnnnnnnnnn nnnnnnnatc ttgcatgcct gcaggtcgac tctagaggat
152281 ccccttcaac atttgttgcc ctatttggct cttaatcaaa aattatattt agacaccttt
152341 cctactgata ttgttcattg ttttgtaatg ttagtctttc tgttgttgtt gttgttaaga
152401 cagggcctcg ctctgtcacc caggctggag cgtggtggcg tgatcacagc tcactgcagc
152461 atcaacctcc tgggcccaat caattctccc ataccaccac tcccggctac tttttttttt
152521 tttttttga dacagagttt tgctcttgtt gcccaggctg gagtgcaatg gcatgatctc
152581 gaccccacca caacctccgc ctcccgggtt caagcgaatc ttctgcttca gcccccgag
152641 tagctgggat tacaggcatg tgccacgatg cccggctaat tttgtatttt tagtagagat
152701 gacgtttctc catgttggtc agtctggtct caaactccca acctcaggtg attcacccgc
152761 ttcggcctcc caaagtgctg ggattacagg tgtgagccac cgtgcccagc tagtcttgtt
152821 agtcttcata tccacaactg aattctgaac ttctaagttc tcagaaagca ggagctgaat
152881 gagaggtctt ctgtctctca cagtgctaaa acaatgctat gcaagtagca gtaacagagt
152941 cagtaggcag taatagatag tgggttgttt aatgctaaat gttaaatgcc tgaatgggaa
153001 aatcatatat atacatatat atatagatag gtgcctacct gtggaattgt cttttgagca
153061 aatagacgac aagagtgatg gaagcctgct cacatcacag tgagatgtac acttagccgt
153121 gtgattacag tggtaaggag aaacatactc agtttgttcc gagcccgccc ctgagaggaa
153181 gttgttagta nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
153241 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn atcttaaatg
153301 tctgcaggtc gagtctagag gatcccctgt ataaaatctg aaagaataga caaaaatagc
153361 tctgaaacta agaagccatt atagcaagat ttcaggatac aggctaatat acaaaagttg
153421 atcatttttc tatatactag caatgagcaa atagaatttg aaattaaaaa tacaatacca
153481 tttacattag cacccccccaa aattaaatag ttaggtacaa atctaacaaa atgtgataca
153541 agagctatat gaaaaaatct ataaaagtgt gatgataaac atcaaagaac taaataaatg
153601 gagatctaca tatggtaagg gtaagagcaa aataaagatt ataaaaataa ataaataaat
153661 acctattgcc tgttcatggt tacagaagac ttaaaattgt taagatatca gttcttcaaa
153721 atttgatcta tagattcaat atagtccta tcgaaatacg cgaaacttat cttgtagatg
153781 tcaccaaact gattccacag tttatatgga gaggcaagag acgcagaata gtcaacacga
153841 tagtggagat gcacgttggg tgactgacac tactcaactt taagacttac tattaagcta
```

```
153901 cagtcatcaa gatagtgtga tactggcgaa ataatagaca cgtaagtgca tgcatcagaa
153961 tggaacgccc agaagtagaa cccacatagt acaactgata tttgatcaga tgagtgagaa
154021 gcgctttcat tgtcagaagg ggggcgttgg tttcaccaaa tgggtgctga agacaacgtg
154081 gcgatctagc atggcaaaga gtagagacta gacgcagaac ctatgactta gcgcagcatt
154141 gggctcagag atgggtctca ggactggaat tgtcaaacct agtcgatagg gcaggtcata
154201 gaggcatcat aacatgaaat accaaaactt taaggaagct agaggaaggg tggatcacct
154261 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
154321 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn atcttgcatg ccagcaggtc
154381 gactctagag gatcccttcc agatgctttg aaggatctag aatttccagc agcttggctc
154441 tggttgacat ttaaaaatta acatacttaa tcctctaatc atatatgatc accgccaaca
154501 aaagtgatag agggtctccc ttagataaaa aattggaatt aatatgtact ttaaaagtag
154561 atctagtttt aaaaactaga tggtgttaca agtacagtaa tgaaagccat tttctttcat
154621 ttttatttga aaaacaatct tatacatcag aaagcttagt aaattaattc attgtctttg
154681 ttttggaatt tcctaaactg agtagataga cggtgagcat cacgatagcc aaagactgta
154741 actgaaggcc aagaatactc tgaggttgga tttttagggca ctaggaaggg ccgctaataa
154801 cgacactctt taaaaactct cactttctcc ctgtaataat tataagaata atatgtctga
154861 cattttttaaa aaaagacttt agaatgggag ttttcataat ttaaatcaga tcagaaaaac
154921 aataaaacga acttaggcca tggaagtcta ggagccaatt ctaacaagaa caaacttata
154981 aaacaacgcc ttcagaatag aagcctaagt tgatagattt aattttcaac aaaaaaagaa
155041 catctacatt cttctgcact aaactgtgaa actcatcata gcagggatga aagccacatg
155101 agacatggca ggtactgaac aaatatttgt tggataattt aaataaaaca atctttctgt
155161 tccaaggaga tcactttgga aggctataca attgttctac tcatggctca aaatactttt
155221 ggggaggttt ttgtttggaa attgccacta gagccagagc tctttccctg ggttgaaata
155281 aggatgtgtg agtttcatca gcannnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
155341 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn
155401 nnnncatgcc tgcaggtcga ctctagagga tccccgtgct ggaagactgg atatctatat
155461 gcagaagaat aaaactagac ccctatctct caccatatac aaaagtcaaa tcaaaatgga
155521 ttaaagattt agatgtaaga catgaaacta ccagaaaaca ttggggaaat gcttcgggag
155581 attgacctag gctaagattt ctttttttctt tttcttttt tttggttgta ggggggtggc
155641 ggggttgcgg gggcagggca gagaaaatat ctccaccttt ctctggtaag agaaagatgt
155701 caccaggtgg cttccaggtt catgggtggt agaataaagc aacagtattg ttctcgacaa
155761 ccccagtcaa catatcaaac gtatcattgc ttttcgtggg ctctaattgg gtcacatccc
155821 tgaatccatc tccatggcca ggataatgct agtgctgagt ggcttagttc taagccacat
155881 gttctgcccc tgaccaggga tatagccaat tccactgaat cagcctgtgg gctagagagg
155941 agaggaagta gtccctagag aataatcagg tttaccttat caacagggag aggggaagtt
156001 gagtgcaaaa actacatact taaccaccct tcaatcagtt caactggata ttttgtggac
156061 caagatattg ttaccggggg gtccttgttc ttagagctcc gaagatggtg gcgggggggc
156121 ttcaagatgg tagccagcct cgtgttatct gaactggggt tcttgggctc acgtattcca
156181 agaaatggaa tcttgggcca tgcagtgagt gttatagctc tatttagaag cgtgggtcac
156241 ggaagaaaac ctagaaacca gtgactagcc ttcactcgat taggatgaac caggcagtta
156301 gcgtgcaaga acaattggca agctttagcc gaatggg
//
```

☐ **1:** AC009938[gi:6978143] This record was replaced or removed. See revision history for details.

```
LOCUS       AC009938              144857 bp    DNA     linear   HTG 15-FEB-2000
DEFINITION  Homo sapiens clone RP11-115B14, LOW-PASS SEQUENCE SAMPLING.
ACCESSION   AC009938
VERSION     AC009938.2  GI:6978143
KEYWORDS    HTG; HTGS_PHASE0.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 144857)
  AUTHORS   Birren,B., Linton,L., Nusbaum,C. and Lander,E.
  TITLE     Homo sapiens, clone RP11-115B14
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 144857)
  AUTHORS   Birren,B., Linton,L., Nusbaum,C., Lander,E., Allen,N., Anderson,M.,
            Baker,J., Baldwin,J., Barna,N., Beckerly,R., Benn,J., Brown,A.,
            Castle,A., Cerny,J., Colangelo,M., Collins,S., Collymore,A.,
            Cooke,P., DeArellano,K., Depayre,E., Devon,K., Dewar,K.,
            Donelan,L., Doyle,M., Ferreira,P., FitzHugh,W., Forrest,C.,
            Funke,R., Gage,D., Galagan,J., Gardyna,S., Gilbert,D., Grant,G.,
            Hagos,B., Heaford,A., Horton,L., Howland,J.C., Jones,C., Kann,L.,
            Karatas,A., Lehoczky,J., Lieu,C., Locke,K., Macdonald,P.,
            Marquis,N., McEwan,P., McGurk,A., McKernan,K., McLaughlin,J.,
            Meldrim,J., Molla,M., Morris,W., Morrow,J., Mychaleckyj,J.,
            Naylor,J., Niloff,M., O'Connor,T., O'Donnell,P., Pavlin,B.,
            Peterson,K., Pollara,V., Riley,R., Roberts,D., Roy,A., Severy,P.,
            Stange-Thomann,N., Stojanovic,N., Stone,C., Subramanian,A.,
            Tesfaye,S., Torruella-Miller,I., Vassiliev,H., Vo,A., Wagner,A.,
            Wheeler,J., Wu,X., Wyman,D., Ye,W.J. and Zody,M.
  TITLE     Direct Submission
  JOURNAL   Submitted (08-SEP-1999) Whitehead Institute/MIT Center for Genome
            Research, 320 Charles Street, Cambridge, MA 02141, USA
COMMENT     [WARNING] On Jul 13, 2000 this sequence was replaced by a newer
            version gi:9113959.
            On Feb 15, 2000 this sequence version replaced gi:5836135.
            All repeats were identified using RepeatMasker:
            Smit, A.F.A. & Green, P. (1996-1997)
            http://ftp.genome.washington.edu/RM/RepeatMasker.html
            -------------- Genome Center
                Center: Whitehead Institute/ MIT Center for Genome Research
                Center code: WIBR
                Web site: http://www-seq.wi.mit.edu
                Contact: sequence_submissions@genome.wi.mit.edu
            -------------- Project Information
                Center project name: L1978
                Center clone name: 115_B_14
            --------------.
```

```
*  NOTE: This record contains 151 individual
*  sequencing reads that have not been assembled into
*  contigs. Runs of N are used to separate the reads
*  and the order in which they appear is completely
*  arbitrary. Low-pass sequence sampling is useful for
*  identifying clones that may be gene-rich and allows
*  overlap relationships among clones to be deduced.
*  However, it should not be assumed that this clone
*  will be sequenced to completion. In the event that
*  the record is updated, the accession number will
*  be preserved.
*          1        995: contig of 995 bp in length
*                        gap of unknown length
*        996       1965: contig of 970 bp in length
*                        gap of unknown length
*       1966       2917: contig of 952 bp in length
*                        gap of unknown length
*       2918       3868: contig of 951 bp in length
*                        gap of unknown length
*       3869       4836: contig of 968 bp in length
*                        gap of unknown length
*       4837       5809: contig of 973 bp in length
*                        gap of unknown length
*       5810       6765: contig of 956 bp in length
*                        gap of unknown length
*       6766       7717: contig of 952 bp in length
*                        gap of unknown length
*       7718       8671: contig of 954 bp in length
*                        gap of unknown length
*       8672       9611: contig of 940 bp in length
*                        gap of unknown length
*       9612      10556: contig of 945 bp in length
*                        gap of unknown length
*      10557      11527: contig of 971 bp in length
*                        gap of unknown length
*      11528      12455: contig of 928 bp in length
*                        gap of unknown length
*      12456      13434: contig of 979 bp in length
*                        gap of unknown length
*      13435      14382: contig of 948 bp in length
*                        gap of unknown length
*      14383      15312: contig of 930 bp in length
*                        gap of unknown length
*      15313      16255: contig of 943 bp in length
*                        gap of unknown length
*      16256      17239: contig of 984 bp in length
*                        gap of unknown length
*      17240      18195: contig of 956 bp in length
*                        gap of unknown length
*      18196      19122: contig of 927 bp in length
*                        gap of unknown length
*      19123      20053: contig of 931 bp in length
*                        gap of unknown length
*      20054      21046: contig of 993 bp in length
*                        gap of unknown length
*      21047      22006: contig of 960 bp in length
*                        gap of unknown length
*      22007      22975: contig of 969 bp in length
*                        gap of unknown length
*      22976      23938: contig of 963 bp in length
```

```
*                        gap of unknown length
*    23939    24920: contig of 982 bp in length
*                        gap of unknown length
*    24921    25883: contig of 963 bp in length
*                        gap of unknown length
*    25884    26832: contig of 949 bp in length
*                        gap of unknown length
*    26833    27771: contig of 939 bp in length
*                        gap of unknown length
*    27772    28731: contig of 960 bp in length
*                        gap of unknown length
*    28732    29674: contig of 943 bp in length
*                        gap of unknown length
*    29675    30635: contig of 961 bp in length
*                        gap of unknown length
*    30636    31556: contig of 921 bp in length
*                        gap of unknown length
*    31557    32484: contig of 928 bp in length
*                        gap of unknown length
*    32485    33418: contig of 934 bp in length
*                        gap of unknown length
*    33419    34373: contig of 955 bp in length
*                        gap of unknown length
*    34374    35339: contig of 966 bp in length
*                        gap of unknown length
*    35340    36253: contig of 914 bp in length
*                        gap of unknown length
*    36254    37199: contig of 946 bp in length
*                        gap of unknown length
*    37200    38104: contig of 905 bp in length
*                        gap of unknown length
*    38105    39018: contig of 914 bp in length
*                        gap of unknown length
*    39019    39957: contig of 939 bp in length
*                        gap of unknown length
*    39958    40927: contig of 970 bp in length
*                        gap of unknown length
*    40928    41866: contig of 939 bp in length
*                        gap of unknown length
*    41867    42841: contig of 975 bp in length
*                        gap of unknown length
*    42842    43808: contig of 967 bp in length
*                        gap of unknown length
*    43809    44791: contig of 983 bp in length
*                        gap of unknown length
*    44792    45714: contig of 923 bp in length
*                        gap of unknown length
*    45715    46682: contig of 968 bp in length
*                        gap of unknown length
*    46683    47626: contig of 944 bp in length
*                        gap of unknown length
*    47627    48610: contig of 984 bp in length
*                        gap of unknown length
*    48611    49576: contig of 966 bp in length
*                        gap of unknown length
*    49577    50529: contig of 953 bp in length
*                        gap of unknown length
*    50530    51481: contig of 952 bp in length
*                        gap of unknown length
*    51482    52463: contig of 982 bp in length
```

```
*                       gap of unknown length
*       52464     53392: contig of 929 bp in length
*                       gap of unknown length
*       53393     54360: contig of 968 bp in length
*                       gap of unknown length
*       54361     55330: contig of 970 bp in length
*                       gap of unknown length
*       55331     56275: contig of 945 bp in length
*                       gap of unknown length
*       56276     57211: contig of 936 bp in length
*                       gap of unknown length
*       57212     58148: contig of 937 bp in length
*                       gap of unknown length
*       58149     59086: contig of 938 bp in length
*                       gap of unknown length
*       59087     60057: contig of 971 bp in length
*                       gap of unknown length
*       60058     61006: contig of 949 bp in length
*                       gap of unknown length
*       61007     61925: contig of 919 bp in length
*                       gap of unknown length
*       61926     62870: contig of 945 bp in length
*                       gap of unknown length
*       62871     63857: contig of 987 bp in length
*                       gap of unknown length
*       63858     64797: contig of 940 bp in length
*                       gap of unknown length
*       64798     65713: contig of 916 bp in length
*                       gap of unknown length
*       65714     66685: contig of 972 bp in length
*                       gap of unknown length
*       66686     67654: contig of 969 bp in length
*                       gap of unknown length
*       67655     68634: contig of 980 bp in length
*                       gap of unknown length
*       68635     69562: contig of 928 bp in length
*                       gap of unknown length
*       69563     70465: contig of 903 bp in length
*                       gap of unknown length
*       70466     71449: contig of 984 bp in length
*                       gap of unknown length
*       71450     72398: contig of 949 bp in length
*                       gap of unknown length
*       72399     73352: contig of 954 bp in length
*                       gap of unknown length
*       73353     74298: contig of 946 bp in length
*                       gap of unknown length
*       74299     75267: contig of 969 bp in length
*                       gap of unknown length
*       75268     76255: contig of 988 bp in length
*                       gap of unknown length
*       76256     77224: contig of 969 bp in length
*                       gap of unknown length
*       77225     78187: contig of 963 bp in length
*                       gap of unknown length
*       78188     79131: contig of 944 bp in length
*                       gap of unknown length
*       79132     80088: contig of 957 bp in length
*                       gap of unknown length
*       80089     81034: contig of 946 bp in length
```

```
*                          gap of unknown length
*       81035      82023: contig of 989 bp in length
*                          gap of unknown length
*       82024      82962: contig of 939 bp in length
*                          gap of unknown length
*       82963      83911: contig of 949 bp in length
*                          gap of unknown length
*       83912      84859: contig of 948 bp in length
*                          gap of unknown length
*       84860      85683: contig of 824 bp in length
*                          gap of unknown length
*       85684      86656: contig of 973 bp in length
*                          gap of unknown length
*       86657      87578: contig of 922 bp in length
*                          gap of unknown length
*       87579      88517: contig of 939 bp in length
*                          gap of unknown length
*       88518      89420: contig of 903 bp in length
*                          gap of unknown length
*       89421      90348: contig of 928 bp in length
*                          gap of unknown length
*       90349      91296: contig of 948 bp in length
*                          gap of unknown length
*       91297      92219: contig of 923 bp in length
*                          gap of unknown length
*       92220      93160: contig of 941 bp in length
*                          gap of unknown length
*       93161      94153: contig of 993 bp in length
*                          gap of unknown length
*       94154      96473: contig of 2320 bp in length
*                          gap of unknown length
*       96474      97407: contig of 934 bp in length
*                          gap of unknown length
*       97408      98335: contig of 928 bp in length
*                          gap of unknown length
*       98336      99270: contig of 935 bp in length
*                          gap of unknown length
*       99271     100218: contig of 948 bp in length
*                          gap of unknown length
*      100219     101070: contig of 852 bp in length
*                          gap of unknown length
*      101071     101993: contig of 923 bp in length
*                          gap of unknown length
*      101994     102957: contig of 964 bp in length
*                          gap of unknown length
*      102958     103900: contig of 943 bp in length
*                          gap of unknown length
*      103901     104900: contig of 1000 bp in length
*                          gap of unknown length
*      104901     105869: contig of 969 bp in length
*                          gap of unknown length
*      105870     106876: contig of 1007 bp in length
*                          gap of unknown length
*      106877     107837: contig of 961 bp in length
*                          gap of unknown length
*      107838     108816: contig of 979 bp in length
*                          gap of unknown length
*      108817     109779: contig of 963 bp in length
*                          gap of unknown length
*      109780     110712: contig of 933 bp in length
```

```
*                      gap of unknown length
*    110713   111632: contig of 920 bp in length
*                      gap of unknown length
*    111633   112573: contig of 941 bp in length
*                      gap of unknown length
*    112574   113502: contig of 929 bp in length
*                      gap of unknown length
*    113503   114427: contig of 925 bp in length
*                      gap of unknown length
*    114428   115354: contig of 927 bp in length
*                      gap of unknown length
*    115355   116284: contig of 930 bp in length
*                      gap of unknown length
*    116285   117222: contig of 938 bp in length
*                      gap of unknown length
*    117223   118151: contig of 929 bp in length
*                      gap of unknown length
*    118152   119157: contig of 1006 bp in length
*                      gap of unknown length
*    119158   120146: contig of 989 bp in length
*                      gap of unknown length
*    120147   121091: contig of 945 bp in length
*                      gap of unknown length
*    121092   122042: contig of 951 bp in length
*                      gap of unknown length
*    122043   122993: contig of 951 bp in length
*                      gap of unknown length
*    122994   123938: contig of 945 bp in length
*                      gap of unknown length
*    123939   124944: contig of 1006 bp in length
*                      gap of unknown length
*    124945   125869: contig of 925 bp in length
*                      gap of unknown length
*    125870   126804: contig of 935 bp in length
*                      gap of unknown length
*    126805   127742: contig of 938 bp in length
*                      gap of unknown length
*    127743   128673: contig of 931 bp in length
*                      gap of unknown length
*    128674   129607: contig of 934 bp in length
*                      gap of unknown length
*    129608   130610: contig of 1003 bp in length
*                      gap of unknown length
*    130611   131525: contig of 915 bp in length
*                      gap of unknown length
*    131526   132472: contig of 947 bp in length
*                      gap of unknown length
*    132473   133401: contig of 929 bp in length
*                      gap of unknown length
*    133402   134334: contig of 933 bp in length
*                      gap of unknown length
*    134335   135291: contig of 957 bp in length
*                      gap of unknown length
*    135292   136218: contig of 927 bp in length
*                      gap of unknown length
*    136219   137158: contig of 940 bp in length
*                      gap of unknown length
*    137159   138157: contig of 999 bp in length
*                      gap of unknown length
*    138158   139105: contig of 948 bp in length
```

```
                  *                     gap of unknown length
                  *    139106    140118: contig of 1013 bp in length
                  *                     gap of unknown length
                  *    140119    141067: contig of 949 bp in length
                  *                     gap of unknown length
                  *    141068    142010: contig of 943 bp in length
                  *                     gap of unknown length
                  *    142011    142980: contig of 970 bp in length
                  *                     gap of unknown length
                  *    142981    143924: contig of 944 bp in length
                  *                     gap of unknown length
                  *    143925    144857: contig of 933 bp in length.
FEATURES             Location/Qualifiers
     source          1..144857
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /clone="RP11-115B14"
                     /clone_lib="RPCI-11 Human Male BAC"
BASE COUNT     40030 a   30486 c   34321 g   39635 t      385 others
ORIGIN
        1 gtttaacttg catgcctgcg gttcggctct agaggatccc cgacctcagt gatccacctg
       61 cctcagcctc ccaaagtgct gggattacag gggtgagcca ccgcacctgg ccgctcggtt
      121 ttaatttcta atgccataaa tattgacggg tttgactctc ataaactaaa gttatctggg
      181 ggcccttaat aattttgag agtgtaaaag ggtcccgaga acgaaagttt gagactcatc
      241 aaattaggca aaagagggat tcagaggatt tgccaaaaag ggaagaggaa agagagaaaa
      301 ggaaagaaga gattcaagtt cagtgaatat taggctgatg gatttggatt cactactatc
      361 attttgttcc aagagcactt tattctgtgt tagataatgg caaacgttaa ttatagaatc
      421 atttaatgtc tttaatacta tgtaacatta attatattat aaaagtataa taatattgtt
      481 attggtttgc accttggcaa tttaaaacat ttcatccaaa tttataaata gttgagaaga
      541 atagaaaaat aactggctcc tgttgtactc acctgctctc ttgggagagg agtttgacac
      601 acgccgtgtg accgcagtac agggcatang ccaagggcgt gctctcattg atgtcccgca
      661 gggtgctgtc cattcccaac tccagcagtg actggacaca ttcgggcttc cctgcagctg
      721 cagcccagtg caaaagtgtc ctggaggggc catgtgaaaa aacacaancg tctgaacatg
      781 tgaattgttc aggctgcttt accaacaaca gctcctgctc aaagtcaagt tgaggtaggg
      841 gaaatcttgt tgccttttca gtntaaaatt gtcagtggtt aatgagcccc aagaatatgg
      901 tggaacatgg gaagggccct tcctctactc taagaattcc ttgcatttaa ctctcgtggc
      961 tttnatacat gtctaagaag agagtaggtg gtgaagccta gagcttgcta acccgcccgt
     1021 tcgagctcta gnagaaacac ccttctttgc ataaatataa tttatgtatt tctctattaa
     1081 tgttcattta tgccatttct tgttagttta gttcttcatt atcatctttg attatatctc
     1141 tttgttcatc aatgtgaaat tttcgttatg aaataaactt ggaagtggaa ttacagggtt
     1201 ataaggtata agcacctatg attttattaa atgttgccac atttatcccc aaaaatggtt
     1261 gtcccaactt atactttaac caacagtatg taagagtttc ccaaatcctt gacaacacct
     1321 ggcatttcag atgtttata attgctaatc cgatatgtat gaagtggttt tcaagtttca
     1381 caacagcttt gttgagtttt tattagactt gcaatgaatg tatagattca ttttcaggaa
     1441 attgatagct ctattatatt gagtctttc cttcataaac atagtatctt cccatgttta
     1501 gttcttcttt tatgtcaccc agtaagtttt atacttctta tccacataag tcttgctctt
     1561 ctttggttag atttattcct aagtaccgta tttttgttgt tggtgctttt gtttttcgct
     1621 ccttcttcct tttgcttctn gtctccgcgc gaccttccct tcnctcctcg ccttttctcc
     1681 tcgtgcccct cccctctcg ccccccgcc gcgtcttgct ttctttcttt cgcccttcgt
     1741 cctcctcctc tcccccccg ttcccccctc cctctcctct cttttttccc ccctcccgg
     1801 ccccgccgtc ccgcgcctcc ctccntctcc ggctcccgct ttctctcttt cctctctccc
     1861 gccccccgc cgctcctccc tcctcctccc cgttctcccc ctccctctt ccctcccct
     1921 tcccgcccgc ccgctccgtc tcgcataaca aaaaaagaa aaaagcctg atactatgca
     1981 aaccctgcng gtgcggctct agnagaatcc ccgncagtat tagagcagga gtgaaagttt
     2041 attgaaaagc tttagagcag gaaagaaagg aagaaaagtc acttggaaga ggatcaagcg
     2101 ggcgacttga gagatcaagt gcatggtttg accttttgat ttggggtttt atatgttgcc
     2161 atgcttccag ggtcttccgt tgcttttccc atgactcttc tttggggtgg gccatcttca
     2221 tgtgcagcag cctgctagtg attgggaggg gagcatgcac agtgtttact ggaattacat
     2281 gcatgctcac ttgaggcttt cttccttgcc agtagaatgt tcccggaagg tcatatacca
```

```
2341 gttaaactcc gccattttac ctctcagtcc acatgcttga gcccactcac ccaactcctg
2401 agatcttatt gaaagctgct aatcaccagt ttcaggggtt ttttggtgtt tgtttgtttg
2461 tttgtttgtt ttgtttgaga cggagtttca ctcttgtcac ccanngctgg agtgcaatng
2521 gcttgttctc agctcactgc aacctccgcc tcccangttc aagtgattct cctgcctcag
2581 cctcccaagt agctgagatt acaagcacgt gccaccacac ccagctaatt nttgtatttt
2641 tagtagagac ggggtttacc tgtgnccccg ggcttgnnnt tnncttctgc ccttngttnt
2701 ccncctgcct cgcttcccnn ntcttgcgtt cctgcctttc cccccctctg gcccggtttt
2761 gtttctncnn ncttcttcct tccttncccg cgtcctccct tcctcttctt ttttctgctt
2821 gcgcctgtcc ccccncttcg gcgccgggct tcgcgtgtcg gggggctctc cgcctcgtgg
2881 ccgcctctgc cgggcctgaa caaaaaaaa agaagaangc ctgagtcttg catagcctgc
2941 aggctcgact ctanaggatc cccttgtgat gttattatga atagagttta atgccataaa
3001 cccccttaaag agtggggggat ccctctacag ggttcagtgg accccatttt gagacccaga
3061 ggcctaaagc acaagctgta acaggaggag gagatggctt acacaagatg ctgcaatagc
3121 atcaattcac acagacatat tctttatagg gaaacttgag cgtcggaagt gccctggggc
3181 tctctctctg gtggtattag gagtctagaa ttccgcggat ccttctatag tgtcacctaa
3241 atgtcgacgg ccaggcggcc gccaggccta cccactagtc aattcgggag gatcgaaacg
3301 gcagatcgca aaaaacagta catacagaag gagacatgaa catgaacatg aaaaaaattg
3361 taaaacaagc cacagttctg acttttacga ctgcacttct ggcaggagga gcgactcaag
3421 gcttcgcgaa agaagataac cagagggcgt acaaagaaac gtacggggtc tctcatatta
3481 cacgccatgg tatgctgcag atccctgaac agcagcaaaa cgaaaaatac caagtgcctg
3541 aatggggtca gtcagcgatt aaaagtattg ggttctgcgg aaggacttgg atgtgggggga
3601 cagctggccg gtgcaaaagg ctgccagaac aatgagctga atacaacggt tataagcgta
3661 gggttggctg tgggcggtgg gccgaaggag gctgatgatc agtaattcta ctgtggtatc
3721 aaaaggtgcg ggcgagctag tgagagggggg agagaggggg gggtgttcgt naggcggggg
3781 gtgtgcgacg cgcggcggac gctaaagagg cggcaaaagg gccgccgccg gctctagtgg
3841 acgaaaacgc gtattcaacg ggttggagga ctttcttgca tacctgcggt ttgctctana
3901 gaaacccagc cgtgagacca cgaaccccct ataaggaaaa aactccgaac acatgcagag
3961 cgtcagaagg aacaaactcc agacgtgcca ctttaagagc tgtaacactc accgcgaggg
4021 tccgtggctt cattcttgaa gtcagtgaga ccaagaaccc accaatttcg gacacactag
4081 gctctgacaa gcaactctgc aaagcaggta aggcttttct ccccacaaaa ggaaaactgg
4141 gcactggcca tgggacccaa ggagatatct gcactgtcta tactttttag gttttctttt
4201 cattttgttt tgtttgaaat agtttcactc tgttgcccag gctggagtgc agtggtgcaa
4261 tcttggctcg ctgcaacctc cacctcctgg attcaagtgt ttcttgtgcc tcagtctcct
4321 gagtagcggg attacaggng gtgtgccacc acacccaact aatttttgta tttttaataa
4381 aggtgggggtt ttgccaggtt gaccaggctg gtcttaaact cctgacctca agtgatacac
4441 ccccctcagcc tcccaaagtg ctgggattac agatgtgagc cactgcaccc aggctgtttt
4501 caaggtttnt taaaattttt tattgtatta ttattattat actntaagtt ttagggtaca
4561 tgtgcaccat gtgcagggta gttacatatg tatacatgtg ccatgctggt ggcgctggac
4621 cactaacttg gcatctagca ttagggatat tctccaatgg tgtgcgtgcc ccctcccccca
4681 ccccaaacag tgcccaaggg tgatgttccc ccttctgtgg cctgggtgct cattggtaca
4741 ttccactcat gaggagaatt tcggggttgg gtgtttgtgt cttgcctagt tactgaaatg
4801 aggattccca atcatcatgt ccctacaagc ctgaacgttt aacttgcata gcctgcagtt
4861 tcggctctan aggatcccct tactttgaga aacgccatga tcaactagcc aatgccatag
4921 gtttctatga ctgagacaac tctgattgct gcttggacct ctgctgtcca ttacagcata
4981 aaccaaagag tgactgaggt agatcttaat tgactgcagg tttatttttgc caaggttgag
5041 gatgcaacca ggaaaaagaa acacaggtca cagtgggatc tgtgacctgg gcttttttcca
5101 aagagagttt taggaacttc agtatttaaa gaggagggta ccgagctcga attcgtaatc
5161 atggtcatag ctgtttcctg tgtgaaattg ttatccgctc acaattccac acaacatacg
5221 agccggaagc ataaagtgta aagcctgggg tgcctaatga gtgagctaac tcacattaat
5281 tgcgttgcgc tcactgcccg ctttccagtc gggaaacctg tcgtgccagc tgcattaatg
5341 aatcggccaa cgcgcgggga gaggcggttt gcgtattggg cgccagggtg gtttttcttt
5401 tcaccagtga cgggcaac agctgattgc ccttcaccgc ctggccctga nagagttgca
5461 gcaagcggtc cacgctggtt tgccccagca ggcgaaaatg ctgtttgatg ggtggttccg
5521 aaaatcggca aatcccttat aatgaaaaga atagcccgag ataggggtga ggggttgttc
5581 cagtttggaa ccagagtcca ctattaagaa cgtggacttc cacgtcaagg gcggaaaccg
5641 gttataaggg ggaagggccg ctacgggaac cttacacaat caagttttttc gtgtgcgggt
5701 ggcctagaag cttaatctgg accctaaagg gagccccgcg tttaaactcg acgggggaag
5761 ccggnacact gtgcagaaag gaagggaaaa gcgaaagagc ggccttgggg gctangactt
5821 gcaagacccc tgcggttcgg ctctagnagg aacacctaat ctgtgcattt ctcccaggca
5881 gtatttgctt ttattttctg cttttgctgc gtttttgtcc cctcatatct catcttctat
```

```
5941  gactggtctc  ttctgttcac  cctgtgccag  cctaaacatg  aaacagtcat  tttcctttta
6001  attccccgaa  gaaactatga  aaaggaagcc  attaagttta  gaagacttac  tgaagataac
6061  agacagctca  aggctagata  ctttaatact  ttaaggctag  atactgagaa  gatttaggac
6121  tccagctttg  ataaaatagc  ttgcatcacc  tagcccttc   ttcaaaaata  actataaacg
6181  ctccctctcc  ccctccccct  gcccctccct  ctctcccctt  tgcatggtct  ccctctgntg
6241  ccaagcggag  gctggactgt  nctgccgcca  tctcagctca  ctgcaacctc  cctgcctgat
6301  tctcctgcct  cagcctgccg  agtgcctggg  attgcaggcg  cgcaccgcca  cgcctgactg
6361  gttttcctct  tttttggtgg  aaacggggtt  tcgccgtgtt  ggccgggctg  ggctccagct
6421  cctgaccgcg  cgtgatctgc  ctccctcgcc  tcccggggtg  ccaggattgc  agaggcggtc
6481  tcgctcattc  agggcgtatt  ctttgccccg  gctggggtgc  aggggtgggg  ctggggtcgg
6541  tcaacctcca  ccttccgccc  gctggccttg  gcctcccggg  ggccgggttg  gggcgcctgc
6601  cggccggcac  gctgtgtaga  aggggggaccg  gccttgccgg  ctgccgtcgc  gtgggtgggg
6661  ggggcccttc  ggctggcttt  ccgtttggag  gtgggtcccc  tttcccggcc  cctccctct
6721  gtaggcggat  ggtgttcctg  tcggcatcac  aaagaaggag  agaaaggttt  tagacttgca
6781  taccctgcgg  tgcgactcta  gaggatcccc  gtttcaccat  gttggctagg  ctggtctcga
6841  actcccgacc  ttgtgatctg  cccacctcag  cctcccaaag  tgctgggatt  acaggcatga
6901  gccatcgtgc  ccggccaatt  aattgtattt  ttaagttcaa  ctatattcct  actgattttc
6961  tgctttctgg  atctgtccat  ttctgataga  gggatgttga  agtgggtacc  gagctcgaat
7021  tcgtaatcat  ggtcatagct  gtttcctgtg  tgaaattgtt  atccgctcac  aattccacac
7081  aacatacgag  ccggaagcat  aaagtgtaaa  gcctggggtg  cctaatgagt  gagctaactc
7141  acattaattg  cgttgcgctc  actgcccgct  ttccagtcgg  gaaacctgtc  gtgccagctg
7201  cattaatgaa  tcggccaacg  cgcggggaga  ggcggtttgc  gtattgggcg  ccagggtggt
7261  ttttcttttc  accagtgaga  cgggcaacag  ctgattgccc  ttcaccgcct  ggccctgaga
7321  gagttgcagc  aagcggtcca  cgctggtttg  ccccagcagg  cgaaaatcct  gtttgatggt
7381  ggttccgaaa  tcggcaaaat  cccttataat  caaaagaata  gcccgagata  gggttgagtg
7441  ttgttccagt  ttggaacaag  agtccactat  taaagaacgt  ggactccaac  gtcaaagggc
7501  gaaaaaccgt  ctattcaggg  cgaatggccc  actacgtgaa  caatcaccca  aatcaaagtn
7561  tttggggggtc  gaggtgccct  aaagcactaa  atcgggaccc  taaaggaacc  cccgtttaga
7621  gcttgacggg  aaaccggcaa  cctggcaaga  aggaaggaaa  aacanaggac  ggcccttggg
7681  cctgatagtt  aaggtgaacc  taccgaaaac  aaacccaggc  tagacttgca  tagcctgcag
7741  gttcgacgtc  tanaggatcc  ccctttttgca  tgagccagag  ttgatactct  tattaaatgc
7801  ttggtgtttg  gagaggagtt  tgtgaggcca  acatttgcct  taggtactgg  tcagacaaag
7861  ctgaacctga  tgagagagaa  gaggtcatca  gattgcacat  acttaaaaag  taaagaaact
7921  ctaggtagtc  ttgcctccca  cccaggctta  aagagttggc  atcaaggtgc  tcaagtggac
7981  ccaacacaga  gactggcgat  gctttcaggt  ttggttctgt  ttgctgctct  tataaactca
8041  ttttgtgtcc  aagtggcttg  ctctgtcaga  tgaaaccttg  gaaaggtaaa  aaatccttct
8101  caagtcaaat  tttcatcttc  ctttgaaatc  tctgaaccca  ttaactcggg  acattaacca
8161  gcactttcat  gttacccacc  tgagaccacc  tcttgttcag  catcaaccat  cttttttttt
8221  ttttttttttt  tttttttttg  ggaaagagca  tgctttattt  ggaagcaaag  tgctgcacag
8281  tgaccgacag  atgaaggcca  cccattgggc  actcacacat  cgtactccaa  aatacacaca
8341  agatggtgtg  ctaataaaaa  tcaatgggaa  caggggttcc  tctggggcac  tcccccaacc
8401  tcatcccttg  aagggggggg  gaaatctncc  aaccatcttc  cttgtggcag  cggggggttca
8461  ctagaaataa  gcccctcagg  gatgcctccg  gggtcttaaa  aaaacacttt  cttaagattt
8521  gtgggagctt  catttggggt  tcatttcatg  tgtgctaagg  catcaaacaa  cttcggacaa
8581  attgcctggt  tgggccccaa  aaaatttttt  agccttgaaa  gtggcaggtt  cttattggcg
8641  ggtcttctgg  tggtgaatta  aaaaggcttt  tggctagact  tgcagcctgc  ggttcggctc
8701  tagnagaatc  cccccactgc  actccagcct  gggcaatatt  gagcactgaa  tgagcgagac
8761  tccggctgca  atcctggcac  ctcgggaggc  cgaggctggc  agatcacgcg  cggtcaggag
8821  ctggagacca  gcccggccaa  cacggcgaaa  ccccgtctcc  accaaaaaat  acgaaaacca
8881  gtcaggcgtg  gcggtgcgtg  cctgcaatcc  caggcactcg  gcaggctgag  gcaggagaat
8941  caggcaggga  ggttgcagtg  agctgagatg  gcggcagtac  agtccagcct  ccgcttggca
9001  tcagagggag  accatgcaaa  ggggagagag  ggaggggggag  ggggagggggg  agagggancg
9061  tttatagtta  tttttgaaga  aagggctagg  tgatgcaagc  tattttatca  tagctggagt
9121  cctaaatctt  ctcantatct  agccttaaag  tattaaagta  tctagccttg  agctgtctgt
9181  tatcttcagt  aagtcttcta  aacttaatgg  cttccttttc  atagtttctt  cggggaatta
9241  aaaggaaaat  gactgtttca  tgtttaggct  ggcacagggt  gaacagaaga  naccagtctt
9301  anaanatgag  atatgagggg  acaaagatgc  agcagaagcc  gaaaataaaa  gcaagtactg
9361  gcctgggaga  aatgcacana  ttactgagag  ctggtgcctt  ggcagtgcac  atggaatgag
9421  aactatgtag  tgagaatttt  ntttcctact  cataatgttc  ttcctctaag  gggacccatt
9481  tatcacaact  ctggtctgtc  actggttctt  actcactggg  ctctcgggtg  ggggatgact
```

```
 9541 attgtttggc attatggaga atttggggtt ggtacttaat ctgtctctac tgccaaaaaa
 9601 acaatactta ctgctaatct tgcatgcctg caggtcgact ctagagatcc cctctgtggg
 9661 gccttggaga acctttatgt ctagctcagg gattgtaaat acacgaatcg gcactctgta
 9721 tctagctcaa ggtttgtaaa tacaccaatc agcaccctgt gtctagctca gggtttgtga
 9781 atgcaccaat cgacactctg tatgtagcta ctctggtggg gccttggaga acctttgtgt
 9841 tgacactcta tctagctaat ctggtgggga cggtggagaa cctttgtgtc tagctcaggg
 9901 attgtaaacg caccaatcag cgccctgtca aaacagacca cttggctcta ccaatcagca
 9961 ggatgtgggt ggggccagat aagagaataa aagcaggcca cccaagccag cagtggcaac
10021 ccggtcgggt caccttcgac accgtggaag ctttgttctt cgtcgtttg caataaatct
10081 tgctactgct cactctttga gtcacactgc ttttatgagc tgtaacactc acctacgaag
10141 tgtgcaggtg tactcctgag ccagtgagac cacgaacccc ctagaaggga aaaactccga
10201 gcacctccga acgtcagaag gaacaaactc cggacgggcc accttaagaa ctgtaccact
10261 gcccgcgagg gtcccggggt ttattctgga agtcagtggg accaaagacc tcccaatttc
10321 ggccacccta gggcgctgac aaacaactgt ggaaagcaag taagggcttt tttcccacaa
10381 aaggaaagcg ggcactgtgc ctgggacccc agggaaatat tggcccgcgc catactctga
10441 aagggctct gtgatttggc ttggtgtgaa aagtttccat gctcttccca caccggaagg
10501 aaaggagcag gtcgggccgc tggagccacc gtcgtggtac aagagtgtag ggagaggccc
10561 ttgatctaat gcataccct gcaggcttcg acgtctagaa gcatccccat tcactgatgg
10621 taacagacct ggtgccatgt gactcagata cattccactg ctaacaatcc agcaaacatt
10681 tcatgtttgt ttgatacctg ctaataatat agtagcatcc agaggcaaga gaaaggtgtg
10741 ggggggacca catgtcccct tattcccaac ctgactacta gagagtatgg catgttaaaa
10801 tgaaagtaag gcttggattg aattttggca gacacataaa ttaatattta ttcataaaca
10861 tgaaaacaaa tgcaaaacta ttttgaaggc agaatggacc agcctaggaa aatgatcaga
10921 tcttcatgca gttaaaaatg caggaccatc gagaagtgag acctgaagat ggtaataaac
10981 tgctgggcgt gccagattct gcaggccagg gtggtagagc tgtgctcctt ctgcctatcc
11041 cttatgccaa gtaagaaacc ctctgggtta gattttgaca aactatttga agtgctaaat
11101 aaccaccttt gaaggttatt gattcctgat tgggattcct aatagctaat taactgccct
11161 gaggggtagg ggtagattcc tgattaggat actttgaatg tttgctaact gctgataaac
11221 gtttgctaac tactgctaaa tgtttgctaa ctgctgctaa nagntaattt atatacacac
11281 tacagcatac tgttcatagc caaatacagc atcactgttt tccccaatct ccagctagac
11341 atctaagtca tgcttgtact gccaatgcct tgccgtcacg ttctgactgt ctaacagctc
11401 atctctcaaa ttggcttctc tttatctccg accactggct gagttcagcc ttatagaact
11461 ttctggatac ggactgcccc aacgctatct acctccggct tctaaggatg ctaccaaatc
11521 tacctaacct aacttgcata cctgcggttc gactctagna gatccccaag ttccttatgg
11581 tcctctatca cttgtaagag agtgaaggag tcttgagacc caaacacttg agaatctctg
11641 ttctagacca acatatgatg atgtttcttc ttctcccact tagacgctac ctcttgagtg
11701 gcagggttta catgcttgaa gcatctttct gcctccctct gatgagggat agatttacgg
11761 tttcatccac agactatggg cctggggcct gtattgtctt caaactctgc cactttaaac
11821 tttggtagaa cttgggttcc cccaaaggag acgttaagac aggctctagc cttgggaaat
11881 tagttcgcct cccagccatc cctcctctct tcccatagaa ccctagagcc agttttcaat
11941 gccagtctct cagagaccct cacctcattt tctctgccga cacttttgca gataagtcta
12001 gcactgacta gaacacaggt tgtagagggt acagcataac gtttttgtgt agaaagatac
12061 ccataacaga atattcgggc cttccgcatg aacacccaag aactcaccct ggaatggcac
12121 aggcaggaac attccggagc ccttacatcc acttcccaaa agatctctgt aatctgcaaa
12181 ataggcacaa accctccagt tagggcaggc catctgcttt tatgccttgc caccccaaac
12241 tcgctctaac ccaccaatcc aattctacct nctggcagca ctgtgtgacc tgagttcatc
12301 atgctgccnc agtggtcagt agggcatcct ctgcggttcg tgaggacana gtggcgaatg
12361 gtccagtctc tgcagcgtgc cgtgtatctc aacacaaaat agtgtggctt gtggaaaacg
12421 gcccttggtt accataggtg cctactgacc acagagcctt gactatgcat gcctgcaggt
12481 tcgactctag aggatcccct gagtttatat ttgcaggatg atataaatga tccaccccc
12541 ccaacacata tagttttgt ctaatggaaa ttttgctgtg attatttata attggcagtc
12601 tttcttccag aagaagctaa aataagactg gcacttatcc tgaagttcct taataaaacc
12661 gcactttaaa attatcatgg gccttgacta tattatatat ttgattctaa ttagtaatcc
12721 tttactgaat ctctgttgtc tcttttctaa atatgtttag ccaccttga ataccattct
12781 ccactattaa tattaattta ctcaaagtat tcacagcatt ctgtaaacat gtatttgata
12841 atatttgttc ccaaatttac ccattgttaa ttatgggtga ctaataataa atttaatgct
12901 atttgaggat gcttttcttg tatcagtgcc actctcanga attactaagt gacattttaa
12961 attgattatt ttaaactctt tctaactaca tagttatgat ttctttcatt ctcatcctgt
13021 tgagagatga gaacgtgttt gtgcctttca taacttgttt aaagcagagt tttagaattc
13081 attttaggc tctaaggtgg ctattantta cactggcaag attattttga atgcaagatt
```

```
13141 ctgacaagaa ttaattaaaa acaataaaaa atgcagagtg cttaaatgtg atatattgaa
13201 agagtagata cttaacttat aaataggcat ctggaagttg atggctgact actattntgg
13261 gataattggc tggccatggg ataatnctac aacgcagaat acctattcaa ggctgcatca
13321 aaaacatcac aaatgttcat tcttttntag ggactctggt aagngacttc tgaaaggaag
13381 aacattttat tttattatct gancatactg atgtgggata accgaaattt aaacgcctaa
13441 cttgcatgcc tgcagctcga ctctagnaga atccccgtgc atggtggtgt atccctgcag
13501 tcccagctac ttgggagact gaggcaggag atcacttgag acacaggagt ttgaggctgc
13561 agtgagttat gactgcacca ctgtactcca gtctgggtga cagagtgaaa ccccatctct
13621 taaaaaaaga aaatgctgga tatagggtgc actatcactt ggatctttca tgtagcctga
13681 catttttttt tttaattttt ccaaatgtaa aaaagacaag tagtgacatt tatttatctt
13741 ttgatctatc tcttttttc catcttttt tctatttgag taacatgtat cccataggag
13801 cttgtagtct ggtttctcac ttggacacaa gtgcctttca ggagttcaca gtgaagtgta
13861 acagacacat acacagttga attacaacac agctaggctt gccagattta gcaaataaga
13921 attagaatgc tcagctcaat ctgaagttta gatacataac aaataattgt ttcatatatg
13981 ttctaaatat ggcatgagac ctatgtgtaa tacaaattat tcattgttta tctgaaattc
14041 aaaattaatt gggcatcctc cattggacct gacaaccta atttacatga cataggagct
14101 actatcgcat gatataaata gagaggcctg ggggaacaca aagacctgac aaacacgacc
14161 gggcgctttt taggcgaaga aagtaaagag gcttcaaata ggaagcatgt ggcaagtatt
14221 gaaccggaac tcacctcgca tgatctgaaa aaaccgatca aatatttggg aatgggaatg
14281 ctggggaatc tggacctaag gggcatattg ggggggcctg gaatagtcag gaggggtgga
14341 acgtttcgag aggcgctggg acaccttaaa aatattgcgg gggctagacg ttgctgaccc
14401 tgcggttcgg gctctagaag gatccccctt gcatagctct ctagtcaaag aaatgtaaaa
14461 ttttgaattt ttgaggggggg ggagaggggg acagaaaagc tttcactaca ttctatttgc
14521 tagtggcagt caactttaga aaccccttct atgcccttcc tctaccccct tatcccagtt
14581 ttctcttttc ttcagctcag acactggaaa agtccatagc aagagcagtt cttaaggcgt
14641 gtgctagaag ggagggggct aggaggacag ccatatgtct gtctgagata tgggacttcg
14701 gctgatatgc acagaccagt ggcttttaaa cttgatgggc aagtttttaa aaatcgcctg
14761 ggaggctgag gcgggcagat catgaggtca agagatcgag accatcctgg ccaacatggt
14821 gaaaccctgt ctctactaaa aatacaaaaa ttagctgggt gtggtggtgc atgcctgtag
14881 tcccagctac ctgggaggct atggcaggag aatcgcttga acctgggagg canagtctgc
14941 agtgagctga gatcgcacca ctgcactcca gcctggggac agagtgagac tctgtctcaa
15001 aaaagaaaa aaaaaaattg gcaggggggt tgggtaacat gcagactccc caacaccaac
15061 tacccagtgc tgctccagag ttctgactga gagggctagg gatacccctg gtcctggctt
15121 gggcctatgg ggataanttt gaaaccctct cctcaaacca gccggctttg atttgaaaag
15181 cacccaggga ttggcccaag gacggggggcc cactggagaa ttgcttcaca ttgctgggga
15241 gctaggaggg cccgagagaa agaaaggggc tctagaaacc gtgggatggg gagctatgga
15301 actagaagga gggngctaagc ttgacaaacc tgcaggttcg actctagnag gatcccacca
15361 tgaggcctag agaattggat tttctttgct aagtgggtgg tattgcgaaa tgggaactat
15421 tctgttcaaa gctggttcta ggagtgtttt gaagtagatg aactttccct cagcctgcct
15481 ttctgaaatt tgttctttt ttaaaaatg gttaattcac ttttttccta atgtagctta
15541 tgttcttcta ctttcttact tgcttaggat caacatctgc tcttaggaaa acacttactt
15601 ttttctttt tcttttttt tttagacag agtcttgctt gcttagtaac ccaaggctgg
15661 agtgnantgg cgcgatcttg gctgactgcg acctgtgact cttgggttca agcgattctc
15721 ctggctcagc ctgctgggtt ctgtggttct ggcggcggcc cgcccacctg cgtactgttg
15781 ggtgtggggg gctgggtgtg ccgcgggtgg ccgggccgcg cggggcccgc ctgcgtcgta
15841 tccgccgccc gcgggggctg gcgggggggtg cggcggcggc gggcggccct gcggggggcg
15901 cgcggggctc tgcgtgcccc cccccccgcg gtgcggngac ggtgtcgggc gttgccgccg
15961 gggcagggcg cggtcggggc gcaggtcaga ggcgcgtggc ggcgcgcgcg cgcggggcgt
16021 tcggcggtgg ggcgggtgcg gcctgggcgc gcgtgggcgg ggtgcaggcg ccgggcgggc
16081 ggttgtggtg cgcggagcgg aagtcgggtg cgcgcgtgtt agcccggcca cgctctggcg
16141 caacgctgcg cgggcgcgcc gtccagcggc gtgcgggcga cccggcgggc gagcggaacc
16201 ggccgtggcc gccggcatag tgcggtcatg aatagcgcac aaagaaaagg acgatngcta
16261 agcttgacaa acctgccttt tcgactctan aggatccccc tgaaatagac acggggattc
16321 aaggtggtca gagttgccag atattaacca gtgtccacct ctggctaacc tctgttagag
16381 attgatttc tgaggctctt tgggagctta gtttatattt atgagttttt actgttcagt
16441 agtgaacctc catggagaag cccttaagtg tattttttt ttatttagtt attgagaaat
16501 attctagccc cttgctgcac aaaagatgga ccaactacca acataatctg gtaacttgcc
16561 agatatccag aatctctgcc cctaccctgg tctactaaat cagaaagttc atcttcggtt
16621 gatcccccag atcacgtttg tgcccattga aatttaagaa gcattgcttt accctgctcg
16681 tgatcaaagt ggggctcaca tataccaaga gtgtcacatt gtaagttgct tttcttgcaa
```

```
16741 ttgggaggga ttggcgttgc tgcancaaca caatcctcct ggacgttttt ggctggtagg
16801 ggtacaggct ggtcacaaaa cagaacatct ctacagagtg gagacttttg gcccattagc
16861 aaccattgta agcaaacagg cacagacttg ctgttcatta accttgttgg taacctcaca
16921 ttttgttttc ctaactctac aagaaccttt ggggaggcaa gttcagttta aattccttgg
16981 aaaagacttt cctgctcaga acaatttaat gcaataaaat atggttctcc taaacccttc
17041 atagtttggc cggaaggagc canaggggag ggagggaaat tggtgaggcc agtttcctat
17101 gttgggctac cttaattaca ccgcggcgac gcggtgtgaa tctgggcact tttcaaggag
17161 taaaatagac ggaaggaggt ggggccagct tgaagattgt caaacatatt taggtgctca
17221 gaaaatgacc tgcacaagag ccttagcttg catccctgc cttcgactct agaggatccc
17281 catttattga aaagaaattc tttctccact gagtttctgt gatgccttta tcataaatca
17341 gatttatcat aaatcctatg gatgtgggtc tgtttctgaa gtctaattta ttccatgatc
17401 tgttgtcttt tcttgttcca gtaccatact gttttaattt ctctagcttt gatatcaggt
17461 tttgtctttt ttcttcagta ttgccttagc tattcagagt tcttttatt tccatatcaa
17521 ttttacaaat agcttatcaa tttctaccaa aaaaattgat agcattttta ttgggattgc
17581 attgaattta tatatccatt tggaatgact tgatatctta agactgttgc atctttgaat
17641 tccatgttca tgatattacc tgtcatttac ttagatcttc ttttacttct ctcagcaact
17701 atctgtagtt ttcatcgtag agatcttata caacttctat cagatttatt ctacataatt
17761 gatgttttg gtgctttaaa aattttacca attgtttgtc tctttttaaa aatagattca
17821 tttccccaat gaaattctcc aacctttctt ccattgtggc tatcattttc tccattctct
17881 tgaccatatt aatcacagtt attctaaact ccctgtcagt tattgttaac atctgattca
17941 cctataaatc tatttactct aaaaaacatt tctacttggg atctccataa tgttggttcc
18001 aaagcctggg acggttcaaa gccctggaac attcgcacaa ggttttcta ttttgggaag
18061 ggtttaatta tgaaccttgg cctcctatac tgaaatcttg gaaaaacttc agctttccgc
18121 ttccttcctt cctcctcttg ctttattact ccttgcggaa gcaccgtgct acgtgggtta
18181 ataatcacta gatgtggtta gacttgcatg cccctgcggt tcgactgcta naggatcccc
18241 cagnatgaac aagactcaga gaagcaaaga gacctcctga aggtcacatg gggagtgaat
18301 gacagaacta gggccagaat caaggtccct gactattctt cagtcactca gcagacattc
18361 attgagtgac tagaatctgc taggcaccac tccgggtgtt aggtgtccat tgctgtcctt
18421 agaagcaagc tgcgctgctc tgctgggggct tcccttctcc cctttcctgg atgcttttca
18481 ttcccagccc cagagtctaa ccccgagacc tccagggcca ctcaccacag cattcctgaa
18541 gacttagaag aggtgctttt gtgtgcagcc ctttcctcca agaccctgga atgcacgttc
18601 gcaggacttg ctgatttata gccatgttgc ctttcaaaga attccctggc ctgcgttaag
18661 tcaacagatt tgagaaaagg ctggttaaaa gttctgtcac gggagccagt tgttccttgt
18721 gttcgcagga tgctttcttt aaccctgggt cctgctcagg ccagtaacag cacaccctgg
18781 gcctacaact gctcaggatc tgggtgtaag acatggaaac tctgtcatat aaatgtattt
18841 agtgctcctc cctcgaatag cccctaaccc tggcatataa atgtatgtac tggccttccc
18901 tggaatagcc ctaagcctct attctctcat ttatcattct ggggtttac tgcctaatgg
18961 gtgtgtggat ctattagcct atttctattt tatgctctgg catgctgcca tcactganac
19021 aagggcctat cctgttggac tgccgacttt tgaaaaatca tgctgcttat tctgctccac
19081 cccctcctca aaatctgcct ggcgggaacg agagcaaata aagcttagac ttgcaatgcc
19141 tgcntgtgcg gctctagnag atcccctgat cgacaataca agtgggaccg tggtcccaga
19201 ccgataatca gaccgacgac acgagtggga tcgtggtccc agactaataa tcagaccgac
19261 gatacgagtg ggaccgtggt cccagactaa taatcagacc gacgatacga gtgggaccgt
19321 ggttccagac taataatcag accgacgata cgagtgggac cgtggtccca gactaataat
19381 cagaccgacg atacgagtgg gaccatggtc ccagactaat aatcagaccg acgatacgag
19441 tgggaccgtg gtcccagtct gattatcaga ccgacgatac gagtgggacc gtggtcccag
19501 actaataatc agaccgacga tacgagtggg accgtggtcc cagactaata atcagaccga
19561 cgatacgagt gggaccgtgg tcccagtctg attatcagac cgacgataca agtggaacag
19621 tgggcccaga gagaatattc aggccagtta tgctttctgg cctgtaacaa aggacattaa
19681 gtaaagacag ataaacgtag actaaaacgt ggtcgcatca gggtgctggc ttttcaagtt
19741 ccttaagaat ggcctcaatt ttctctatac actcagtgtg gaacacgaga cctgtccagg
19801 ttaagcacca ttttatcggg cttatacaat actgtcgctt caggagcaaa ctgatgtcgt
19861 gagcttaaac tagttcttga tgcagatgac gttttaagca cagaagttaa aagaagtgat
19921 aacttcttca ccttcaaata taaccccagc tttnttctgc tcatgaagtt anaatgctgc
19981 tgcttaataa tttctcttat ctgtaaggct gttgaatggc tacctgacgg gcagaagtca
20041 acgggtgaga aacggcttta tactatgcat gcccctgcgg tttggctcta gnagnatccc
20101 ccgaanaagg agagaaggaa gaaaaggaga ttttgtcagg gctcttcaca aaatgcttca
20161 gaaaagaatg ggaagagtaa gatcccttc agctatatat aacattgtat aatgttataa
20221 ttttactctt tatgttacag gaatctattg tttaaattta attgaggcca aaccctcaac
20281 ccaagaacac atcccaaacc aaccctccac tgagtaagtt cactgatttg aggaatgctg
```

```
20341 aaagaacagc cttcccccaaa ctattgccac tgctggcttc ccatggggct ggaagctttc
20401 cccatgacca tcacactgtt gggacaaaga aagcattacc tggtgtaatc tgaaagccat
20461 tcacatgaat gatccacgta ctgcaggtac tgtccacaag tctaggaaga ttaaagtgaa
20521 aacatctcca gtctctgtat tggacataaa ccttgccctt tttcaagatt ccctcaattg
20581 ctgtcttctc tcagttggcg cctcattccc agtgtcacag atgaaatgct acatagtggg
20641 gcacggcacc tgagcagctg agaaagggct agatgatgcc acccagaagt gtaaggggcc
20701 ttaactctcc atggagtaaa tcttgaccac tgggaaacan gaaatgaaag agaatcagag
20761 tctggccata ccaccctgaa tgagcccaat ctcgcctgct ctcggaagct aagcaaggnt
20821 ggngcctggt tagtactcan gtggaaaaag agatcaggca gactatgtcc tgccttgatc
20881 cattctagaa tggcttctct ttaaaactct ccaaaaagca gggcgcggtg gctcggccta
20941 tattcacact ttgggaagcc gagctggcgg atacctgagg tcggcactca gacaagctgg
21001 caaattggga aacctgctnt actaaataca attaaccagg ttagagngcc tgagagtctt
21061 gcatagccct gcaggtttcg actctagnag catccccggt attaagtcct agtacaagaa
21121 caggagaaca ctcatgtctt agctcaagcg atcagagaca gagagaggtt tcagctttcc
21181 tctgcctttt tgttgtattc aagctttcga gattttgcgt gattcccccc agcattgggg
21241 agggcaattt ttttcacagt ctactgattc aaatgttaat ctcatctaga aatgcactca
21301 cagacacacc cagaataatg tttggccaaa tgtgttggca tcccatggcc cagtcaagtt
21361 gacagataaa attaatcatc acatttccac ccctcatcaa cttggcacct atacacctct
21421 ccataaacca tacttaatct ccagatagga caataaccac atcatatatg cacctaacat
21481 gggtaccgag ctcgaattcg taatcatggt catagctgtt tcctgtgtga aattgttatc
21541 cgctcacaat tccacacaac atancgagcc ggaagcataa agtgtaaagc ctggggtgcc
21601 taatgagtga gctaactcac attaattgcg ttgcgctcac tgcccgcttt ccagtcggga
21661 aacctgtcgt gccagctgca ttaatgaatc ggccaacgcg cggggaagag gcgtttgcgt
21721 attgggcgcc agggtgggtt tttctttcca ccattgagac cggcaacaac tgattgccct
21781 tcaccggctg gcccttgaga ggattgcagc aagcgggtcc acgcctggtt tgccccaaca
21841 ggcgaaaatc ctgttggagg ctgggtccgc aatccggcaa atccctctat attcaaaaaa
21901 taacccgaag taggttggag gtgtttcccc ttggaacaaa attccctttt aaaaacggac
21961 ttccactcaa ggcaaaaacc ttttaaggga tggccactct gacaacgcct tatacttgca
22021 tgccctgcgg tttgactcta naggatcccc tgtagtataa tcatcttaac ttacaaggta
22081 aggaaagcaa gggataaatt gtgaccagct ggagcacaca gtaagcagca gcactgggat
22141 ctgagtgtcc aatcagctcc agtggccatg ggatttactc cactgtacca ctgctaatcc
22201 ctttatgttt cagtcttcac atataaacag tgaaggtgct gggttatata ttcactaaga
22261 ttccttctaa ttctaaaggg actgctattc taagatgaaa cacttccagg atccatcctt
22321 aaattggttc ctgctgtggc cacctgaaac caaccaacct atctcaactc cactgtatat
22381 tcagtggtcc ctgctgggcc ggcccagttg tggccagaac tctaggatgc catttttaaaa
22441 ataatattaa gtgatcagat ggataaaagt gtcaatctgg gtgaatttca ggtgcacctc
22501 ttacagtttt ttaaaatagc agactgtgtg ctgatttact gtggtgaatt gaagatccca
22561 ggagtggtct aagggtaaag tcgatgggcc cacaaccaaa gagcaagatg ccaaggctga
22621 aagaattctt tnttttttta atcaactgtt gttttgtgt gaccttgttt acgggttaga
22681 gatttctgaa ctctcttgga gaaggtccac tggttgctgc atagaacaat gggctgagta
22741 ggtaataaca acccatcttc agaggctgcg tgataaaagc caagccctgg gcttggcata
22801 tctagttcga cacatcaggt ccacgggtat atttaacctt tttacctctt ntcctncctc
22861 tgggatgccg gggcattctt tggtccaggg cagactgcct ggaaacgaat ctctctggag
22921 aggggggctg cacactaact gagcctctac aaagctatca aagaacccag cagggggctag
22981 aattgcatgc ctgcggttcg actctagnag atccccgatt gactcaagtc cacaggccac
23041 acctgcctat agccacaatg cctgccgctg tgagatacca cctctcggat ccctttcaga
23101 tgaacttctc caaggtgcta tgattctttt agagtacagt tatttgcaaa aaaaaaaaaa
23161 aaagagagag agaaaatact ttgagtgaca ggagaacgat ggttccatgg atagaaatat
23221 gaaacagaga gggataacag ggaaaaaaaa atgcattctg gtttgcaact agtgaatttc
23281 ctagtgctgg cagagatgtc caacaggcac ttggaaactt caactagaac aagggacaaa
23341 agccagagct gaagataaag aactaaatcc cttgcaagga ggtaatgact gaaattaagc
23401 aactgaaaga gaatgccaag ggaggagccc tggaaagagg aagggtccat ccttgggatc
23461 aactgtctga ggatgcagga aacagagaag gacatatagg tgctgagtag gagaacctca
23521 aggatggcgc ttctgaagca aagttaaaaa gaatctgggc cgggcacggt ggctcgcgcc
23581 tgtaatccca ncactttggg aggtcgaggc gggcggatca tgaggtcagc agatcgagac
23641 cgtcctggtt aacgcggtga aaccctgtcc ctactaanaa tacaaaaaat tagccgggcg
23701 tggtggcggg cgcctgtagt cccanctact cgggaggctg aggcaagaga atggcgtgaa
23761 cccgggaggc gggagctgca gtgagagatt gcgccactga cttcagcctg ggagacagac
23821 aagactccgt ctcaaaaaan aaaaaaagaa gaagaagatc tgcggaggcg atggccacaa
23881 tggcaatgcc actcttttgg agtgaggaga tcagaccagt gagaaccacg ggnatgacgg
```

```
23941 ctagacttgc atgactgcgg ctcgactcta ggagatcccc ccaaagcacc tggggggaaag
24001 gcggagtatt tgtgggtaag gaacatgcct tccagccttg ttctaaaaac caaacattag
24061 tagtacattc cagttattcc tcaaaggaat tatttttttc cagtaccctg tattaaatta
24121 attttgattt tgcacctagt ctcactgctt tagatcataa cctgagtgtg acttcccttt
24181 gctgagcagg aaaagtcttg cctctctaca tctctatgta tcactttcaa atacaaaatt
24241 ctgggtttct tattctaaag aactgctttc tgctcttgtt tctcatggcc agcagaggga
24301 ctccagagaa accctcagac agagcgtggg attaggccac tttgtggtgg tgaaagatcc
24361 cccagctctc tagagaagtg acatttaacc ctaggttttc ccagcacaca tacaaaaggt
24421 ttgagaaata gagccaggtc tctcaggacc acaggtaaca ataatcttta cctgaggctg
24481 agaagagctt tgtaatcaca tccacccctg gcagagagaa agaaagcagg ttagcactta
24541 aaaaaaaaaa aaaaaaaaaa agaattgtga aaactgaagg agaaaacaac cagaaccgtg
24601 gacacgagcc attattcctc gttgacgtca canccctcca gagctgcaga gaggggatat
24661 ttgggagact agggacccaa ctcaatttat tatgtttgtg ttggctgata aacttcacaa
24721 aggtcctagt catcactgaa atatttagtc acttggaaac ttttgtcctt tattcccatc
24781 ctatanacca tgagcaattg ttaggaaata acggtggttt ggcacacatc tggagacatg
24841 tgaaaatatg aatgcttttc cctggtgggg gatggtattt atctacccct tggaaaaagg
24901 tggggattcc taagatctaa gcctaacttg cataactgca ggtcgactct anagatcccc
24961 acccgggcct gttgtggggt aggggagggg gggagggata gcatgaggag agggacctaa
25021 tgtaaaagac gagttaatgg gtgcagcata ccaatatggc acatgtatac atatgtaaca
25081 aacctgcaca ctgtgcatat gtaccctaga acttaaagta taaagaaaa caaaaaacaa
25141 acaaaaaaac ccctgcacat ctgtgcgtgg gaactttaaa aatccacaac acaatggaat
25201 aagagcgggt accgagctcg aattcgtaat catggtcata gctgtttcct gtgtgaaatt
25261 gttatccgct cacaattcca cacaacatac gagccggaag cataaagtgt aaagcctggg
25321 gtgcctaatg agtgagctaa ctcacattaa ttgcgttgcg ctcactgccc gctttccagt
25381 cgggaaacct gtcgtgccag ctgcattaat gaatcggcca acgcgcgggg agaggcggtt
25441 tgcgtattgg gcgccagggt ggttttctct ttcaccagtg agacgggcaa cagctgattg
25501 gcctttcacc gcctggcctg gagagaattg cagcaagcgg tccacgctgg tttggcccca
25561 acaggcaaaa attctgggtg gatggttggg tccaaagtcg ggagatgccg ctttaaataa
25621 aaggaatagc ccnaaaaagg gtggaagggt tgttccagtt ttgggaacaa gagtgccctt
25681 attaaagaac gtggcctccc aaggtgaaaa gcgaaagacc gggtataagg cggagcggcg
25741 ccatccggga cgaaacacaa tagtaagttt ttggggcggg gggcgcgaga ggacttatcg
25801 ggaccgtaga gggcgccggc atgtaaactt gcaggaaaag gggcgacggg gggggaggaa
25861 ggggaaggca agagcggggc ggggctggaa cttgcatgcc tcgcggctcg tactctagna
25921 gcatccccgg ctgagttcat gtcctttgca gggacatgga tgaagctgga aaccatggtg
25981 gtgaggaaac taacacagga acagaaaacc aaacactttc atgttctcac tcataagtgg
26041 gagttgaaca atgagaacac atggacacag ggaggggaac ataacatact ggagcctgtt
26101 gcggggggtg ggggactagg ggagggatag cattaggaca aatacctaat gtagatgaca
26161 ggctgatggg tgtagcaaac caccatggca cgtgtgtacc tatgtaacaa acctgcacat
26221 tctacacatg taccccagaa cttacagtaa aaaaaaataa actttaaaaa ggatatgaac
26281 tctttgtttt aataaaatgt atattataat caggcacagt ggcccacacc tataacctta
26341 nctctttggg aggctgaggc aggcaaatca cttgagctca ngagtttgag accagcctgg
26401 acaacacggc aaaaccccat ctctaaaaag aacagttaca caaattagcc aagtgtgatg
26461 ggtgtggtgg tgcatgcctg gtatccagct acatggaagg ctagagtgcc aaggtcattt
26521 gagccangag gtcgaggctg canttanccc agatcacacc actgcactcc agcctgggca
26581 acaacgagac cctgtctgaa aaaataaata aaatgttttt acagtcagac aggctactct
26641 gtgattcctg atgggccact ggctctaata aaaagcttgg tggatttctt gcacatgcga
26701 tggctnctca tcacggtctt tgggctgtcc aaaatgaacc aaatcgggtt atttttatct
26761 agacagatgt aagcaataaa attgtgggac ttcccgttca gggttatagg acggatccag
26821 gtgcacaaaa acgctagact tgcatgacct gcaggctcgg ctctagnagg atccccgacc
26881 atgctattag ttggttcagg catgcacaag gcataatgca ggtggctgcc aaattcaaag
26941 gagttgccta cagttctgtt tcttctggga atgccctctc atgaaatctc aggtggttga
27001 aatgaagaga ctttcatgaa gggacagctt gcagagatga cgcagggctg aaagaatgaa
27061 ctaggatgc tgaagctcca cagactaaca tcagtgggaa gccaatccca tccttacagc
27121 taagaaggat gggaggggac cattttatca gggaacccag agagactgac tctgcagagg
27181 aagagactgg ctctgccaag aaagagcctc ctgttgggag agaagtggct cctgccgaac
27241 acggcactag gggaaggcag gaagaaatgt cccatctctc tcttctcccc atcaggctcc
27301 tgcccgtgcc tctcatgggc aagcaaaagg gtgagggagc ctgggtggag cactcggcaa
27361 gggtcagtcc tcagggtaca gaatagggtg ggaaaggctg cctcaccctg cacatgtgga
27421 gaacggagaa gggagagcac catgtctctt tgaaaaggag taaactgagg tattgggagg
27481 acaaggaaca tgtgccagat caaaaggggc atgcagaacg agatgagggc ccacttgccc
```

```
27541 tttcctctgt gggctcctgg gctcgagaag ccggatgcct ggaattatgg aaatctcaat
27601 ggactgcatg ccttaggtcc ttgcaatctg ggggggggaca aaggcgtgag ggatcccttt
27661 ttcaaagtgg ggggggggggc aaccggatga ccagactctg ctggttactg gagagtgtaa
27721 ggataactgc gtggggccac tggggttttg ttctttagga acggtccaaa tagccttaga
27781 ttagcatgac cctgcggttc ggctctanag gatcccccctt tgatgagttg agagaaaaag
27841 gcttcagaag atcagtaata acaaactggg gtgagctaaa ggaggatgtt cgaacccatc
27901 acaaagaagc taaaaacctt gaaaaaagat tggacgaatg gctaactgaa taaatagcgt
27961 agagaagacc ttaaatgact tgatggagct gaaaaccaag gcacgagaac tatgtgacac
28021 atgcacaagc ttcagtagct gattcgatca actggaagaa agggtatcag tgattgaaga
28081 tcaaatgaat gaaatgaagc cagaagagaa gtttagagaa aaaagagtaa aaagaaatga
28141 acaaagcctc caagaaatat gggactatgt gaaaagacca aatctacgtc tgattggtgt
28201 acctgaaagt gacggggaga atggaaccaa gttggaaaac actcttcagg atattatcca
28261 ggagaacgtc cccaacctag gaaggcaggc caacattcaa attcaggaaa tacagagaat
28321 gccacaaaga tactcctcaa gaagaccaac tccaagacac ataattgtca gattcaccaa
28381 agttgaaatg aaggaaaaaa tgttaagggc agccagagag aaaggtcggg gtacccacaa
28441 agggaagccc atcaaaccaa tagatgatct cttggcagaa actctacaag cacaaagaga
28501 ggagggccat tattcaccat tttaaagaaa agaattttaa cccagatttg ctatgcaggc
28561 aactaagctg ctaagggaag gagaaataaa tctttgcana ccagcaatgg tgagaaattt
28621 gtaccaccag cctgcgctaa agactcctga ggagccctaa ctggaaggac actggttaga
28681 cctgcaaaca gccaatgaaa gacttgtgct ggaaaacgct aacaacacaa gngtctanga
28741 tcatatgcat gaccctgcag gttttcgact ctagnagaat ccccacaagc accaagcact
28801 atgctacata aataattcat acccaccaca ttaggaagct tatggcgatt gtacagataa
28861 acataataga tgtgttagct ataggtgcca atacattccc taagtgcgtc aacatttgtc
28921 attgggataa gtgtgtatta aatatttgag ggcacgtttc ataagtaaaa ttccaattca
28981 aatgcagttt attccatctt cttgcatggg ggtagctgaa aagagccagc tgcccatcct
29041 acagaatgag tccagaaagt gatgcatctg atgtctacag tttgccaaca aagtcattct
29101 ccccacttta gtctcttggc aaggagaagg caagcactga ctggtacaaa cctgccacct
29161 gcaggagcca agaggaacaa acccaaattc cagggaagta cggtgaccag aggggggccat
29221 ctaacaacag accatcctgg gatctggctt cacccctcag tgtgagccaa caccctgtca
29281 ctgatcccgc ccacctccat tcttaatggt gaagcctggt gaaattgaac actgaggaag
29341 ctctcaagaa acgaaggcat ggaaactttg catggagtga agtcaggctg acctaagcac
29401 caatcccaac gtggccactt accagctata tcactgtaac catgtgcgtc aacctctgta
29461 gacctcattt tattggctgt aaaatgagat actggcaatc aatgtctgtt gaatgaatga
29521 aagaacgacc aatacttttt ggttggtggg atagaaaaca tggttttgaa aaggcctctg
29581 gagtacatgc caaatcaaaa ataatgaggt aaaatcttta tttaaaaaac caacttctct
29641 gattgaccac tggataaact aactaaattt gggagctttg actatgcaga ccctgcaggt
29701 ttgacgtcta aaggatcccc tttattctac cacccatgaa cctggaagcc acctggtgac
29761 atctttctct gtgaggagag aaaggtggag atattttctc tgccctgccc ccgcaacccc
29821 gccaccccc tacaaccaaa aaaaagaaa aagaaaaag aaatcttagc ctaggtcaat
29881 ctcccgaagc atttccccaa tgtttctgg tagtttcatg tcttacattt aaatctttaa
29941 tccattttga tttgactttt gtatatggtg agagatnggg gtctagtttt attcttctgc
30001 atatagatat ccagtcttcc agcacctttt attgacgaga ctgtcctttc ccaaatgtat
30061 gtcttggtgc ctttgttaaa aatgagttga ctgtaaatgt gtgaacttgt ttctggaatc
30121 tcaattctgt tccattggtc tacgtggctg tttttatgcc agtatcatgc tattttggtt
30181 actatagcct tgtagtataa tttgaagtca agtaatgtga tgcctccagc ttaagtcaat
30241 ttacatagat tttgtgtatt cgtttggatt ttcttttttaa tcactgaaaa agttctgact
30301 gataaaacgt tttaaaaaag aacttggagt tgtagctgga aaattagctc tatagaaata
30361 aacagcggtt gtataaatta gtaggaagtc tggctgaatt accaaatcta gtagccatat
30421 tgaaggcagg gataggcctt ttccattcta actggtcagg gtcatattgg aggctatggt
30481 ctcactgaaa acagggttta gtggctggag aacattanaa ggggagtgac tgggaggatg
30541 aatggacttt atcatggccg ggaagaaggg tgaggagaaa agggcctctc tgaaaaatcc
30601 aggggctgga agagcttaca aataagaatt tttatgcctg agaaagcatg cctgcggttc
30661 ggctctagag gatccccgac ccatacctat tgataaccaa gtttggctcg catgctaaag
30721 aggatgtctg ctacgttcat ccagaatggc ttgggttatt tgcccaatta taagtctact
30781 taaaaataga tgaaattatt attatgaaga ataataggat aaccctctat tttgttcaga
30841 agcaggcttc ccaccttcct acattcgcgt ctaggtaaac ctcaaaatta tccagtaaaa
30901 tgagaaagat gactgaagat ttttcctcct tatactgaaa gcaataaaaa tcaaaatgtt
30961 gtctgggcag ggtggctcac gcctgtaatc ccagcacttt gggaggctga ggtgggtgga
31021 tcacgaggtc aggagatcga gaccatcctg gctaacaagg ttgaaacccc atctctacca
31081 aaaatacaaa aaattagctg ggaatggtgg cgggtgcctg tagtcccagc tactcgggag
```

```
31141  gctgaggcag  gagaatggcg  tgaacccggg  aggcagagct  ggcagtgagc  cgagatcgcg
31201  ccactgcact  ccaacctggg  cgacagaacg  agactctgtc  tcaagaaaaa  aaaaaaaaaa
31261  tcaaaatgtt  aataaatgcc  tggagaagaa  ggaagataat  gataagaaaa  gaaccttttg
31321  ggtttctgaa  agtctggaag  gaaaatcaac  aaaaatgcat  caaacttcag  agtataaata
31381  ttgaatatga  ttctgtagaa  ttgaccatta  tatctaagtc  taaggtagag  caagtatttt
31441  tctggcattc  cagtcttgag  tctagtttac  tgagcataaa  actgttctag  tggtaatgtc
31501  taaacatcag  tctcgataaa  gaaatgaact  aagaccaaag  aagctgctgg  caattaagct
31561  agaattgcat  gcctgcggtt  tgactctagn  agcatccccc  aaactcctgg  cctcaagaga
31621  ttcttatcat  cctcccaaag  cattaggatg  gtgggcatga  gccacagcgc  ccagccctag
31681  caatattttg  aaaatcaaaa  gcatttccaa  aaataaggga  taaaaatgat  agaggcagag
31741  tggatgaata  ttttcttttg  tggaacccaa  gagttatggc  taacatatag  agtaataaaa
31801  atagtgacaa  tgaaataata  ttagttattg  tgaacttgtg  tcaatatatt  ttaagcgcat
31861  ccccatcaga  gccttacaaa  gccctacgag  gcaggtactc  accaccagag  actggataat
31921  ttcagtttcc  agttgtgagc  cttgttagct  ttggtttcaa  gagatattct  acttcctccc
31981  cagaaaccca  cggggaagct  aactgggtag  gagagttgtt  caaaggtcta  ccttataaac
32041  tgaaaataat  gcatgaagtt  gcaaggtttc  tgtgtgggat  ttggactcan  tcccatttca
32101  tcttgggaag  ctntctttgc  ctgtaagggt  ttctcagatg  tccacttttg  tctgagtctt
32161  gtggccataa  aactgccttt  accaaaagtt  tattttaagg  gctatgactc  ggggacataa
32221  agaaatgttt  gaagaagggg  aaagggataa  aagcatgcaa  gattctgtat  ggatgggaca
32281  tttgaacagc  cacccactgn  cttagttgac  acatggtggg  agaccttcaa  aaaccacact
32341  tgggtaacag  ccttaatgac  ttggttagct  gatggatcat  tggttaaggt  tggtctcact
32401  attctattta  gagatggtac  ataaacaaac  tgcttttcgg  agtcagaaga  ctgtgctaag
32461  taaaaaaggc  aagacaggct  atctgtttaa  tcttgctgac  ctgcaggttc  gactctanag
32521  gatcccctta  acatctgtgg  ggtaggattg  gttgagtaga  agcttgaggc  taaggaatgt
32581  ggagaacaac  gaaaactggg  gaaggtggtg  ggagggactg  gaagataaag  aacaggggag
32641  acaaagcagg  ctcttaaagg  gacaacgcca  agcagatgac  tcaacccaca  atcagggctc
32701  actttaacaa  ctgtgtcata  atactagtcc  tcaccggtgg  agatttcagt  tcagcatttc
32761  ccaacattag  agcaagcctg  gttaagcctt  actgaaaatc  ctcaagaccc  tctcctctca
32821  aactcttcct  gcaatccttt  tgggaggtcc  taggggtgcc  ttgagtccat  gtcaaacaag
32881  tcctaaccac  cacatggagg  tcatactttt  tcttcctctc  cagagaggta  cccagagatc
32941  ttcactatga  ccaccattgc  taccagtgca  gcttcttgca  tttgctatgg  cttgcatttg
33001  ctattgctgc  ccactgatgg  caggtgaatt  cactctggac  cagccccatg  ggagggggtg
33061  ctgctgagtt  aaatagcttg  cctttccaaa  caccacccgt  ttctgcgtga  cctgtcgtga
33121  ttggatgaag  catggcccaa  gtctacagag  attgctttga  agcctactgt  gtgatgggct
33181  attggggcgc  tgtctgttaa  actgcaggcc  aatgtgggaa  gaaatttgga  actggggtca
33241  caaatctttg  tggtcatttc  cttggggggg  tgggtcaatg  ggaaggcggg  ggtgcggggg
33301  gagaggttta  aaactttaga  atggggccag  acaggcccag  gggttaccta  actttgaggt
33361  caactttgga  aaggaggggg  tgggggttgg  ggagggcgtg  ggaagaacgc  ggagtggtgc
33421  tagaaaagca  tacctgcggt  ttgactctag  naggatcccc  ctgggcaaag  taaattgaaa
33481  acctttgctc  tattagtttc  tgccagagaa  aataaaaaaa  aataagaaaa  actctggaaa
33541  gaattaacta  ttcaagatac  ccttaaaaac  attcatgatt  cgtggctcat  gcctgtaatc
33601  ccagcacttt  gggaggccaa  ggcgggtgta  tcatgaagtc  aggagattga  gaccgtcctg
33661  gctaacatgg  tgaaacccca  tctctactaa  aaatacaaaa  aaaattagcc  gggcgtggtg
33721  gggggcacct  gtagtcccag  ctacttggga  ggctgaggca  ggagaatggc  atgaacccag
33781  gcggcagaac  ttgcagtgag  ccgagattgt  gccactgcac  tccagcctgg  gtgacagagc
33841  gagactccgt  ctcaaaaaaa  aaaaaaaaaa  attcatgatt  cgggtttgga  agaagttaat
33901  ttcaactctc  caaacaggag  ttttgaagaa  gtcttaaagg  agttcagaac  ttcagtagag
33961  gaagtaactg  cagatgtagt  ggaaatagca  agagaactag  agttagaagt  gaagcctgaa
34021  gatatgatta  aattgctgca  atctcatgat  aaaccttgaa  tggatgaaga  gttgcttctt
34081  atggatgagt  aaaggaagtg  atntcttgag  atcatatcta  ctcctgggga  gacactgtga
34141  atatgttgaa  aatgacacag  agatntagat  atacataaat  tanctgataa  atantgtaag
34201  gtggagagaa  tgactcagtt  tgaaagattc  tacgggggta  aatgcttcaa  ccatataatg
34261  tacatacaga  actcttgatg  aagaaggagc  atggtgcaca  acttattgtg  gtatttagac
34321  tggctagtta  ccacctgaca  gcccaccaat  atgggagcat  actgaggaga  cctgtttaaa
34381  ttgcatgcct  gcggttcgac  tctagaggat  ccccganaac  agtgagctct  atgttaagtg
34441  ctggccatca  ttaagactgt  tacgtgaggc  gttgaaacgg  atcctgaaaa  gatcacatga
34501  gcaatgcagt  accagcgggt  gctcttatag  agactcggag  atactgttgt  tctgtggaag
34561  taatcgtgta  gcagtcttca  ctaactttag  ggttattctg  agtcttttaa  ttccttcaga
34621  tgtgctacca  acaattctag  aagctaagaa  ctttgactgg  ggacctacca  caagacttat
34681  ggagtgtgcc  tgaaatggcc  tttggctgta  cccccaaatt  cacgcacacc  actacagaga
```

```
34741 gggtatatct ggggtccccg ctccccaagc cacagttcca gtgaacaggc tacaggagga
34801 gcctcctcta aagtgtcaat aatgattgag tatatataag gttgccatta caattaagca
34861 aggaaaggga gaattaacta ataactgact attttgaaaa aaattgattg cagaatacaa
34921 aaagaaagtt tacaaattta tattaagtac aattcaatat caaataaata agcacaaggt
34981 ttcataaagt tatttctaat cataaaagca gtgaaatcaa tttaaaaatg cagtatccat
35041 agattttgac tatataaatg ctgaaaagat atgtgtttac caacaaaacc aaactgagaa
35101 ccttattggc aacaggggaa gggtactgta gcattataac agatgaaagg ttagtgtctn
35161 tactggatat aagcactntc tttnttttttt ttttttttttt tgggaactat cttcgtcttg
35221 cgccagctgg gggcagggcg ccgacttggg tactggagct ccgctcccgg ttacccttttt
35281 tctgcctacc tccggggggcg ggactcggcc ccgcccgaac cgttattttt tttttagact
35341 ctttaacttg catgcctgca gttcgactct aaaggatccc ctctttgctt cctcgccagt
35401 tcgctcgcta tgctcggtta cacgggtgcg gggagcgcta gtgataataa gtgactgagg
35461 tatgtgctct tcttatctcc ttttgtagtg ttgctcttat tttaaacaac tttgcggttt
35521 tttgatgact ttgcgatttt gttgttgctt tgcagtaaat tgcaagattt aataaaaaaa
35581 cgcaaagcag tgattaaagg atgttcagaa tgaaactcat ggaaacactt aaccagtgca
35641 taaacgctgg tcatgaaatg acgaaggcta tcgccattgc acagtttaat gatgacagcc
35701 cggaagcgag gaaaataacc cggcgctgga gaataggtga agcagcggat ttagttgggg
35761 tttcttctca ggctatcaga gatgccgaga aagcagggcg actaccgcac ccggatatgg
35821 aaattcgagg acgggttgag caacgtgttg gttatacaat tgaacaaatt aatcatatgc
35881 gtgatgtgtt tggtacgcga ttgcgacgtg ctgaagacgt atttccaccg gtgatcgggg
35941 ttgctgccca taaaggtggc gtttacaaaa cctcagtttc tgttcatctt gctcaggatc
36001 tggctctgaa gggctacgtg ttttgctcgg gggaggtaac gacccccaag aaacaggcta
36061 atggatgacg gatgggacca gatcttatat tatgcagaag aactctcctg ctttcttctg
36121 ggggaaaaga acatggccta tgcataaagc cactgctggg cgggctgaca tattcttcct
36181 gggggcttga cggttggaac gggtaatggc aattggtaag gaactgccaa cgtccaacgg
36241 agcgcggtgg gctgccttga ataagcatac cctgcggttc tgactctaga agcatcccct
36301 acttgtcttc agagaggaaa gtctgttacc aagtcctgct ctctgtgtgt gggtgggaat
36361 tctctgggga atgtttacat gtttcattaa tcattcctca gtcactgata gctcaaccaa
36421 cgctgcatcc ttggacccat tatctcctgc cattcagcgg ccaccacatc cgcccactct
36481 tgtctctgct gaattccttc tgaatcatgg gccctgccct ttagccccct gctgtgacag
36541 ctgaggcaga ttggctgtgt ttgcaggaca tcctgaagct tagagataag aaggagctaa
36601 cgtttagaca acttgaaatt aggtaccaca gactggcccc aaggacatga gtatattaga
36661 gattatctat atgctcccct cgttactcag caaaaccctg ttcttctgga tcgcttccat
36721 gttgatggtc agaggaattt aaacagtcgg tcttagtaat tgtcatgaag gagtatttca
36781 caaagcttct gagtgaatca tcacatgttg gtaagcctga ctagatcaac atccagccct
36841 ccatctgctg aatttattgg caatacactg tctaaatggg aggacataat ctgctgggga
36901 cccgtcctgt ttcagaataa atgtctgctg gagacctctc tcacatagga tggaactaat
36961 cacatctgcc acattcaaat atgcagtgtg attgatcact ggtgtgaaaa atacttgccc
37021 tattaggtac cgagctcgaa tccgaatcat gtcataactg gttcctgggg aaaatgtatc
37081 cgctcacatt cacacaacta cgagccggag cataaaggaa acctgggtgc ctaatgatga
37141 ctactcactt aatgcgtgcc tcactgccgt ttcatcggaa actgccggca ctgataagcg
37201 ccttgacttg cataccctgc gtttgactct anaggatccc cctgtagcct ctgctcanca
37261 gttctgcttc ccaggctccc tgggacaaat tctgagcccc ctgctccttg gccctacccc
37321 gaaacgggta ccgagctcga attcgtaatc atggtcatag ctgtttcctg tgtgaaattg
37381 ttatccgctc acaattccac acaacatacg agccggaagc ataaagtgta aagcctgggg
37441 tgcctaatga gtgagctaac tcacattaat tgcgttgcgc tcactgcccg ctttccagtc
37501 gggaaacctg tcgtgccagc tgcattaatg aatcggccaa cgcgcgggga gaggcggttt
37561 gcgtattggg cgccagggtg gtttttcttt tcaccagtga cgggcaac agctgattgc
37621 ccttcaccgc ctggccctga gagagttgca. gcaagcggtc cacgctggtt tgccccagca
37681 ggcgaaaatc ctgtttgatg gtggttccga aatcggcaaa atcccttata aatcaaaaga
37741 ctagcccgag ataggggttga gtggtgttcc agttggaaca agagtccact tttaaagaac
37801 gtggactgca acgtggaacg gcgaaaaacc gtcttcgagg ccgatgtccc acttcaggag
37861 cctgcgccgg gctgggcggt gggtgcgggg ttcgtgcggt gcctcggtgg cgccgtttgt
37921 gtctttttctc tgcctctcgt tgtttatgcc cctcgctctg ctgctttttc gccgatttgt
37981 ggggggggggg tctgggggtg gtggtcgcgc ggttcggaaa ggtctctggc gccggganag
38041 ctgtggcagg gcgcccgata cgctcataac actgggtaga tgttaattaa aaaataatat
38101 aaaggctaaa aatgaatgcc tgccgtacga ctctaaagga cccctccttc ccttcttttg
38161 cctgggtgtg gatgctgttg gccctctct ccccgtgctg agagaccatt tgggttggag
38221 gagtgctgat ggtgcctcaa gctcggttcc tgctgcaagt ccatgtggtt ctgccccatt
38281 gagctgcacc tcacccaaca ggccatttat tggaaggata tggaaagaaa ggatgaggat
```

```
38341 agaaaaacaa tgctctcttg tagcatgaac tgtgaatggg tttgagtcac taggagatcc
38401 catcttccca cctactttat ctcaagtatc atcttattct aggctctgac aaacaactct
38461 gcaaaggagg tagggctttt ctccccacaa aaggaaaact gggcacttgc catgggaccc
38521 aaggagatat ctgcactgtc tatgcttttc aggttttttgt tttgtttcgt tttgaatcca
38581 gaatctacaa agtacttaaa caaatttaca agaaaaaaat caaacaaccc catcaaaaag
38641 tgggcaaagg atatgaacag acacttctca aaagaagaca tttatgcagc caacagacac
38701 atgaaaaaaa tgctcgtcat cactggccac ccgagaaatg caaatcaaaa ccacaatgag
38761 ataccatctc ataccagtta gaatggcgat cattaaaaag tcaggaaaca acangtgctg
38821 gagaggatgt ggagaatang aacacgttta cactggttgg tgggactgta aactggttca
38881 accattgtgg aaaacagtgt gggtaattct caaggatcga gactagaaat ccatttggac
38941 cacccatcca ttactgggat atacccaaag atataaatat gctgcataaa gacctgcccc
39001 cttatgttat gggggcctag cttagaagat atgcaataac cctgccggtt tcggactcta
39061 gaagaatccc ctttctattt gagtaacatg tatcccatag gagcttgtag tctggttttgt
39121 gagcgtggac acaagtgcct ttcaggagtt cacagtgaag tgtaacagac acatacacag
39181 gttgaattac aacacagcta ggcttgccag atttagcaaa taaaaattag aatgctcagc
39241 tcaatctgaa gtttagatac ataacaaata attgtttcat atgtgttcta aatatggcat
39301 gagacctatg tgtaatacaa attattcatt atttatctga aattcaaaat taattgggca
39361 tcctccattg tacctgacaa ccttaattta catgacatag tagctactat ccatgaatat
39421 aaatagaaag ggctgtggga acacaaagac ctgaacaaac aacgacctgt ccccttctca
39481 ggcgaaggaa aataaagaag gccttcaaat aaggagcaat gttgccaggt aatgaaacca
39541 ggaactgcac ctgccagtga tctgaataaa cccgatcaga atatttggga aattgtgaaa
39601 tgcttgtgca gtctggagca taaggtgcca tattgtaggt gccttgagat cagctaagga
39661 ggtttgatac tattcagtag gccctgggaa ccctngaaaa atttatgcag gggagtgaca
39721 gggtcagact tgtttttagg gtaagaactc tggagtaggg aatgaactta ngaaacagga
39781 agttaagatg agcattagga agcagtacag taattaaaga aggttctgat aagggtgaaa
39841 ctaaccaatg gcttggagaa tagagagaag ccaattgaga gagatgactg taacatgtag
39901 actgggcggg caggcttggc agtgacacat gacttgatgt ctactgggag atggaaagct
39961 agaaaagcaa nactngcggt tcnggctcta gnagaaaccc catttctaac ttgttctgta
40021 tcaatctctg tatttttggc ttgttaataa ccagtatcta ttgtcttgta tttgtaataa
40081 aaatatgata tactaaattc aaacaaagtt ctatattcta ggcacaacca gattttttgga
40141 taagtcaaat agccatatag tagatgcttg ttgaatctaa taataaacac cagcttcctt
40201 tgcccttgga taggatgatt ctgaggcatg gtgtttttact ccgtttgcca tttccctttc
40261 aggattaaac tccttcaggg ttaaactcca ctgccacctg tgagaatagg tctaataacg
40321 ttcttttat gggctgctgt tccctccctg tattactttc ccacgttcct actgatattt
40381 cctgcacttc tcaataagtt acttgcattg gaatcattgt ctcagggtct gcttttacgg
40441 aaacccaaat taaaatattt ctccacaaga gggtacattt cataagggca gggtctttgt
40501 ctactctntc tttgtctgct ttgtccactc catgtcctta cagcctanca cagagagggg
40561 cacaaaggag gtgctcagta catntcagtg catgagtgaa acttcactga agaactttcc
40621 ttgctcaagc tgacaacctg ctcactgaca ttgtaacatt ggaacccaat taaccatcct
40681 tcatggggta agaactttct gacaagaact tctgtagtcc ttgaaattgt ctagtctaac
40741 aagaaacatg tactggaaga ttggttctaa ggtttctgga attggctctc aaatctgata
40801 aaattaaggt atctaatacc tttattctaa ggagtaagaa agccttgata gccctggggg
40861 gaaggggcaa taaaatatgc aaaagaggcc ctggatttct catttatgtc gggcaacggg
40921 cgggggggngt ttaacttgnc atgcctgcag gtttcgactc tagnaggatc ccctaaatcg
40981 gtgaaggtca cacactcagc aaacggcaga tccagctctt aacctgccca ccctctcata
41041 ccatccccag ccccagccaa agtcccttgg ctcacggcag gcctgagatc acaggaatga
41101 aaaacctcag ttaaagaaaa aatcagaaat atgagtttct ctgtcacaaa gcaaagagca
41161 tctaagtaga agtgtactta ccagcaagat tgaaagctgc aggaaaaaat atggaagcaa
41221 atatatttcc ccagaaatga ttttcactaa actacaaatt ttttaaccat taagactttc
41281 tctactgcca aataagaatc aatagttatc ttttcatgga tattaaaaac cccttgtttt
41341 taaaagaaca gtaaataaat aagtttcacc agaaaattct tgaccgggta ttcttaaagt
41401 gtggtttgga aactttaagc ctctttcagg tcaaaactag ttttcatgat aacactgagg
41461 catcaatcgc ctttttcatc tcgtcctctc aagtgtgcat tagtgctctc cagaagctac
41521 atgatatgtg atatcaaaca gactantggc agaaacagat atgagaatcc acctgtcttc
41581 tgatagaaag catttctcaa agagaaattt ggccagatat caaagagatg gcaaacattt
41641 tatagagact acatcagggt attttgataa tttttgctta gaaaaaagca tgtcatagaa
41701 gggggattta aggccatggt attgggtttt taatgggagt cttaaaataa aaacttttta
41761 aggcttccgg ggtttattca ggttaggacc tgtgggggtt tactcaactt accaaattcc
41821 ttgggggcctt ttcttggaga aggagagagc ctggaaccaa cacgagccct agaattgcaa
41881 aacctgcagt ttgactctag aggatcccct tctttccaca catcatggtg gtagaatttc
```

```
41941  attttgggaa tgagctcaga tgctaaaaaa ttcctttctt tgtaattgta gctggattca
42001  aggttgtctt actttctaaa atgatggttc ttactagtgt aaggattggt accctatatt
42061  tttgtttcat ttggcattgc ctcaagggtc ctcctgaaag tgcagttggc aaacatttat
42121  ttttataaga tatatacaca tacataatac atattctccc acccagttca ccgtcaccac
42181  aaaacttgag aacatcttga aaataactgg tgatcctctg aatggctcca aatcaagacc
42241  caaattactt cattactttt ctaaatactt gtgcaatata aatgggctgt gaacactcag
42301  tcaagtaaag ggaaatttcc tgccgctttt ttttcttttt cttttttttca tttgggctga
42361  tgagaaataa gaataaatcc tcttagagtt aataatgtga aaaccaaagc tttcaaaagc
42421  agctcaaagg cagcggttgg tattgcacac tntatttang aacattttac tacaactgct
42481  tacttctcct ttcttcttct tctttcttca acttctggtg ggcccgcaaa aattgtagtt
42541  gtcttatgtt aaaattctgg tgaccagtta aggggcaaac atcaggctta ncattggtnt
42601  ctgtactaag cagtgacaga aatcacgatt aagctgtgat gcacataaaa gcagatgctg
42661  tggcatattc acccatgtat gctccctgca ctgacacaac ataggggacc gagctcgaat
42721  ccgaatcatg gtcatacctg ttcctgggtg aaatgtatcc gctcacattc ccaacactac
42781  aaccggaaca taaagggaag cctgggtgct atgatgacta ctcatnatgg gtggctactg
42841  cagcctaaaa catatgcnat aaccctgccg gtttcgagct ctagaagcat ccccanacta
42901  cctagagttt ctttactttt taagtatgtg caatctgatg acctcttctc tctcatcaag
42961  ttcagctttg tctgaccagt acctaaggca aatgttggcc tcacaaactt ttccaaacac
43021  caagcattta ataagagtat caactctggc tcatgcaaaa gtgaatgact agtagaaata
43081  atggggacag aaacagaggt gttcttgtca tccgatcatc ccttttcctg gaaaatttga
43141  atattttcca taaaattatt atacagttat tcactttaaa gctgttctca aatgtccata
43201  gaggctcagt catgaacgga tattcattga ggcttcacac tgtctgggca tgtcaggaac
43261  catccatgta ataaatagac atgagcacac atctatgaaa acttagctgg ttactcaaga
43321  cagtgtgtcc aagcataacc tggaaattcg tcccatgagg actcagaagc aggaaagaaa
43381  atgtcactgt taactgatgt gcatagaaaa ggcttcattg atggaagaag aatagaactc
43441  aggcagagaa gaggaaagaa gggcctctgg gtgggaaggc acccagagca aaggcaccca
43501  ggtgggaatg cgtatgcata ctangatgca gaattctctc catttaccta agggtcaagg
43561  aggtgggagc aatgtaagaa ccgaaaaatg tnttcagatg tagaattagc atatataaag
43621  gaataaagat tttgtctgtt tataaaaatt tgctgaaggt atctaaaata agcacattta
43681  agnaagatct acgattactc tttagagaga aaatatattg gagaaaaatc tctccctatg
43741  gagaactgaa tctcctggtc ctgcggtggt tttatctatg ttttgaacaa gcaccttatt
43801  cttggttggc ctagacttgc atgcctgcag tttgactcta gaggatcccc gtttagtgaa
43861  aatcatttct ggggaaatat atttgcttcc atatttttc ctgcagcttt caatcttgct
43921  ggtaagtaca cttctactta gatgctcttt gctttgtgac agagaaactc atatttctga
43981  ttttttcttt aactgaggtt tttcattcct gtgatctcag gcctgccgtg agccaaggga
44041  ctttggctgg ggctgggggat gggatgagag ggtgggaagg ttaagagctg gatctgccgt
44101  ttgctgagtg tgtgaccttc accgatttac ttagtgaatc cagaaagaag ctttttattg
44161  gaagtagcca aaacaaacaa acaaacaaac aaaacaaaac agaaaaaccc agcctgaaag
44221  ccttaaacaa gaagaacaat gtattttctc atatattatg aaggctgagg tagaatttca
44281  ttagagttgg ttgattcaat ggcccgataa gggagaactc aggttcttgc catctttcta
44341  ctctgccatc ttcaacatac cagtagtatc tttagctact cttcttggta ccctgagtca
44401  cgtctggaca caacatctga tggaagaaac aggaactttt cttcccatat gtctctgtat
44461  tatctagtaa tcctttacaa aagcctgccc ccttgcacta gcagacctca tctcatgaat
44521  tattgaacaa aactaggtca cttgttccta cctaagccaa ccccagctat tgaaagtggg
44581  ttctgtgatg ggcctcccta attggatgcc tgccanagct gnctggggga gggtggacct
44641  ttgaaaaaaa ttgagatggg tcatgaagga ggagcggttg gggtagaaaa cgctnatgtc
44701  tgctacactg agttggctag acctatgttc ctatctgcac ctggataaaa atattctggc
44761  ttaggccctg ggctactctt attaagttgc agctttaact tgcatgcctg cgtgttgact
44821  ctagaggatc ccctcgtcca attacatagt acgttacata tcactatcat atgcatggtc
44881  tcattctgac catgcatacc cttatcaaag atacctttat cagttaagcc aagcaagtgt
44941  tgacttgcct tagatcaagc ccaagtgtat taatgcaaac tcagatattc agagttgagt
45001  aggttgttct tatgattttg ccaaagtgcc tcttaaagga taagaacagg gattcccggc
45061  tgggtgcagt ggctcacgtc tgtaatctca cactttggg aggccgagcg gggcagatca
45121  cgaggtcagg agttcaagac cagcctggcc aacatggtga aaacccatct ctactaaaaa
45181  tacaaaaatt agctgggcat ggtggtgtgt gcctataatc ccagctactc gggaggctga
45241  ggcaggagaa ttgcttgaac caggaacccg gaggtggagg ttgcagtgag ctgagatcgc
45301  accactgcac tctggcctgg gctacagagt gagactccat ttcagaaaac aaaacaaaac
45361  taaacaacaa caaccngaac cccagcgaat tcaccctgtg agggcccanc gggggtctgg
45421  gaatctggtt gttaacagca ctggtggtga ttccatcgca agggcaaggc taaaacgcaa
45481  ctctacactg gggctgggat ggggggagggg ggaccctggc attcagaata cctggggagg
```

```
45541 ttttcaaaag gacatggtgc tggatcaagg ataaagggca tgggtggagg ggacttgggg
45601 aaggcctggt ttgggcactt ctggacgtga gaccaccata ggagtttctg ggagcgcagc
45661 ggtgctttgg gccccgtgag ggggacccga cccccgagca cccaggaggg gggtgcctan
45721 atacgttgca taaccctgca ggcttcgact gctagaagca tcccccattt gtgtaccatt
45781 atttctgtga atgtaagttt ttatttctcc agcaaagata cttaaaagtg ggatttgtag
45841 gttataagta tgtgtttaac ttcggaagga actgctaaat tattttccag agcagctctt
45901 accactttac attcccacca ggaatgtatg aaagttccag ttgctccata tcttcaccag
45961 cacctggtat tgccaagctt tgttctcttt gggtttttttg gtttgtttgt ttgttttttct
46021 tattttagcc atcttcatag gtgtgtattg gtatttcatt gtggttttaa tttgcatttc
46081 tctaatgaca gatgttattg agtacctctt catgtgctta tttaccatcc atatatcttc
46141 tttgacgaaa tgtctattct gatcttttgc taattttttaa aattggttta ttttcttatt
46201 gttccgttct gaaagatttt attattttat tttattctat tttattttat tttatctatt
46261 ttttgagatg gagtctcgct ctgttgccca ggctggagtg cagtggcatg atctcggctc
46321 actgcaagct ctgcctcccc gggtcacacc attctcctgc ctcagcctcc caagtagctg
46381 agactacagg gnccgccaac atgcctgggt aatnttttgg tttattagta gacaccgggt
46441 ttcatcatgt tagccaggat ggtctcgatc tcctggacct gggatccacc tgccttgggc
46501 ctccaagacg ctgggattac aagtggtgag ccaccgcacc cagcaggtct ggaggatttt
46561 atttacaatt aacaaggtta ggtatacttg gtggaccagt ggatgggaaa atttcctcca
46621 gcctaggctg gccttttatt ccttaaaaac acgggttcgg tgaaaaaggt aagaccggga
46681 atncctagat cttgcatgcc ctgcagtttc gactctagag gatcccctgt actaagaaaa
46741 attcttctgc cttgagatgc tgttaatctg taaccctacc cccatccctg tgctcacaga
46801 aacatgtgct gtgtcgactc aaggtttaat ggatttaggg ctatgcagga tgtgctttgt
46861 taaacaaatg cttgaaggca gcatgcttgt taaaagtcat caccactccc taatctcaag
46921 tacccaggga cacaaaacac tgtggaaggc cacagggacc tctgcctagg aaagccagga
46981 attgtccaag gtttctcccc atgtgatagt ctgaaatatg gcctcatggc aagagaaaga
47041 cctgaccgtc caccagcccg acacatgtaa agggtctgtg ctgaggagga ttagtaaaac
47101 aggaaggcct ctttgcagtt gagataagag gaaggcatct gtctcctgct cctccctggg
47161 caatggaatg tcttggtgta aaacccagtt gtatattcca tctactgaga taggagaaaa
47221 ccgccttagg gctggagatg agacacgctg gcggcaatac tgctctttaa gcattgagat
47281 gtttatgtat gtgcacatca gaagcacagc cctttttttct taaccttgtt tatgatacaa
47341 agacatttgg tcacatgttt tcctgctgac cctttcccac tataaccctа tggcgcgccc
47401 acatcccctc tctgagatgg gggaaatatg atcataaata ctgagggaac taaaagacgg
47461 gagcggggcg cgtcctcctt acctgacgcc cgtcccgggg gccactttgt tctggatact
47521 taggctggac cgttttttgtg aagntctcgg ccacggcaga acgttccgtg tgggggaggg
47581 ccccttccga gattaaaccg ctgtaacggg aaaccccttt ctaaacagct aaacttgcat
47641 gactgcggct cgactctagg agatccccgg ctaccaaggc gaagaatctt tatttaacaa
47701 agcgtactac ggcggcggga cgaacttctt ccgaaaagaa agccagaagc ttcagcagag
47761 cgctaaaaaa cgcgatgctg agttagcgaa cggcgccctc ggtatcatag agttaaataa
47821 tgattacaca ttgaaaaaag taatgaagcc gctgatcact tcaaacacgg taactgatga
47881 aatcgagcgc gcgaatgttt tcaaaatgaa cggcaaatgg tacttgttca ctgattcacg
47941 cggttcaaaa atgacgatcg atggtattaa ctcaaacgat atttacatgc ttggttatgt
48001 atcaaactct ttaaccggcc cttacaagcc gctgaacaaa acagggcttg tgctgcaaat
48061 gggtcttgat ccaaacgatg tgacattcac ttactctcac ttcgcagtgc cgcaagccaa
48121 aggcaacaat gtggttatca caagctacat gacaaacaga ggcttcttcg aggataaaaa
48181 ggcaacattt gcgccaagct tcttaatgaa catcaaaggc aataaaacat gcgttgtcaa
48241 aaacagcatc ctggagcaag gacagctgac agtcaactaa taacagccaa aaagaaatgc
48301 cgatacttga ttgggatgtt cttttatgtc tcaacaagat ggtgaatgga cttaggggta
48361 gatccacagg cgggggggggg tcgcctggac ccgtattcca tagtggctcc aagtagcgaa
48421 gcgagcaagg actgcggggg ggccaagcgg tcgggcaggg gtccagaacg ggggcgctag
48481 aaatgcgtca acgatttagc gctgcagccg ccttaggacc tgcgagtgct tgggaagagc
48541 aatatccgga agagacgcgg cgggcacggg taaccaacct atgcctcaac tccaggatag
48601 cggtgcggag agctaagaat gaatacctgc gtttcgactc tanaggatcc ccttttttcac
48661 ggaagcttct gaagatgggt tgttatttac ctactcaggc catgtgttct atgcagcaac
48721 aagtggacct ttctccaaga gagttcagaa atctctaacc ctgtaaacaa ggtcacacaa
48781 aaacaacagt tgattaaaaa aaaaaagaat tctttcagcc ttggcatctt gctctttggt
48841 tgtgggccca tcgactttac ccttagacca ctcctgggat cttcaattca ccacagtaaa
48901 tcagcacaca gtctgctatt ttaaaaaact gtaagaggtg cacctgaaat tcacccagat
48961 tgacactttt atccatctga tcacttaata ttattttttaa aatggcatcc tagagttctg
49021 gccacaactg ggccggccca gcaggacca ctgaatatac agtggagttg agataggttg
49081 gttggtttca ggtggccaca gcaggaacca atttaaggat ggatcctgga agtgtttcat
```

```
49141 cttagaatag cagtcccttt agaattagaa ggaatcttag tgaatatata acccagcacc
49201 ttcactgttt atatgtgaag actgaaacat aaagggatta gcagtggtac agtggagtaa
49261 atcccatggc cactggagct gattggcact canatcccag tgctgctgct tactgtgtgc
49321 tccacctggg atatatttat cccttgcctg tctttacctt gaaagtaaga tgattatact
49381 acanagaatt gttgaaaact ggtgggtgtg ggttatagga ccggtgtaaa gatgattacc
49441 accatcctca ggagacggtt ttaaagattg atgaaggaat gcgtaccaag gaccgggcac
49501 acgccgggcc cacaaacacc tagaagggct cgggttctat aaagactact agggacatgg
49561 tgactgctcc aggaagagtt taacttgcat gcctgcggtt tggctctagn agcatcccca
49621 gnaagtaggt attattctct gcattttatg gataanaaat gtaggcagtg ggagctcgcc
49681 caagacactg gctggttggt atggagcagg gattctaaca gtggcagtct ggccccagca
49741 tcagtgctct tatgactcaa cacaccacct gtctgggact gctcttgctg gggtccaagc
49801 ctgctgtcct ggcacctgag atgagatggg tcttacatca cttactcana gatccgagga
49861 caggagggag tctgaacttg gctgatgggg gtgtagaatg actcctgggc catggtaaca
49921 caaaatgaga gctcgggggga agcacaacag agggctgcaa atcatctagg aattgacata
49981 gatgctggac aagtatctcg caggtcacct ccataccaca gaacagcaag gaagtcccag
50041 gctggcaatg agacacctgg tttctggttc aggctgtatc actgagccac tgtatggtgg
50101 tcttggcaag ccaggaaggg cctcaggttc tttgttctca caacatatga gagacagcca
50161 gagccagagt gagggcaaga atgcaggaga gggccttgat ctgtctatgt gtgtccagct
50221 ttgacgatca atggatctca gagacttcac agtcaagtgg gagtgggcca catanatcat
50281 cacatatcag tcacagccct gacagagaag acatgggaat aaaagggtgg caactggaga
50341 aagtctaggg aaagacattt aaactggaac cacaaggctg gatagggtga ttcacgcctg
50401 taatccaaca cttcggcggg tgaggtcgtt tgagtcaaga gtcaagacag cctggcaatt
50461 aggaaacccc ttctctaaaa cactaaaatt attgggcgga tgtgcaccct gtagcgaact
50521 cctgaaactc cttgacttgc ataccctgca ttcgactcta aaggatcccc ttgttgatgg
50581 gaggcttttc tcaactcttt aagtatttca ctccagtctc ttcttgcttg tctggtttct
50641 gagaaatcag aggtaatcct tctctttgct cctctatagg taaggtgttc ttttcctctg
50701 gcttccttct ggactttttc tttatctttg gttttctgta attggaaaat aatatgccta
50761 ggcatagggt tttttgtttg ttttgttgtt ttttttttgtt gttttggca tttatcgtgc
50821 ttggtgttct ctgagctttt gtgtctaaca attttttttgg taaaattctc agttgttatt
50881 attgtttcaa atatttatcc tgttcctttt tctcttctcc ttctggtatt cctattgcct
50941 gtatgttaca ccttttgtag ttctctcaca gtctgtgaat attctgttct gttttttttca
51001 gactttgttc tttttgtttt ccagttttgg aggtttacat tgagatcttc tcaagcgcag
51061 agactcttcc ctcagctgtg tccaatctac tgataagctc atcaaaggca ttcttcattt
51121 ccattacagt gtttttttatc tccagcattt attattagtt ctctcttaag atctccatct
51181 tcctgcttac atcgcccatc tgttctgaca tgttgtccac tntatccatt tacagccctg
51241 agcacattaa tcatagttgc tgtaaattat gtatctgata attccatatc cctgccatgt
51301 ctggaactga tgcttgctct gtaaaaattg gggtatacac cctttggcat ggcttatatt
51361 tntttctcga tagcagacat gaggtagtgg gaagaaggac tcctggaaat acgcttaata
51421 tgtatggcgg aagatggggg aagaaaaagc caaatcggct agattgggcc cgtgcttaag
51481 gggctagaat tgcatacctg cggttcgact ctagaggatc ccctgacttg ggatctgatt
51541 ttagattgct gataagacaa aatgtatgtt ctaactgttg ggtgcatagt agggttgctt
51601 tggaacagtg tcttgtgttg atgagtaatt ctgcgccttg aacctgtgcc accacaattt
51661 cagttaaagg cttacaagtc ctatcagctt ctcagaacat ttttttttttt ttcaaaacca
51721 cttttgtgtt ttctgaacca gaaatctgct ttagtgctta gcaggtttca tgtttcagaa
51781 ctgtacttttt agagtgtctc tagacaacac tgaaaggcac acagagagaa atgttgatgt
51841 ggctgggtgc ttggtttgtt ccccgtcttg gttggcggtt cggggcgggg tggtggaggg
51901 ggagggttaa aaattatagc aggtgtctgc tggctgagag gtcagtaaac aattccagat
51961 gctttgaagg atctagaatt tccagcagct tggctctggt tgacatttaa aaattaacat
52021 acttaatcct ctaatcatat atgatcaccc ccaacaaaag tgatagaggg tctcccttag
52081 ataaaaaatt ggaattaata tgtactttaa aagtagatct agttttaaaa actagatggt
52141 gttacaagta cagtaatgaa agccattntc tttcatttgt atttgaaaac aatctttaca
52201 tcagaaagct antaaactat ncattgcctn tgttttggaa ttcctaaact gagtagatag
52261 acggtgagca tcacgatagc ccaagactgt gactgaaggc cagaatactc tggagttgga
52321 tttttagggcc ctaggaaggg ncgctaatac nacactcttt aaaactctac tgtcctcctg
52381 gataattata aaatatatgg gctgacttct taaaaagaac tttgatatgg aggtttctaa
52441 gtaaatanca cagaaaaaat gagngccttg atcttgcata ccctgcagtt ttcgactcta
52501 gnaggatccc caaacctaaa accccttaat gaaggggagg ctggagccct tgaggaaagg
52561 ccctggtacc ctactaaatg tttatactgt taatctttct ctcagttttc cccaaaagag
52621 atgtatggcc tttttactag ggtaactgtg cattgagaaa agagaaataa tcagacctct
52681 caggcttac tggacattgg ctctgagctg acactaattt caggagactc aaaatatcac
```

```
52741 tgtggcctgc cagtcagagg agggactttt gaaggtcatg cggtcaatgg gatttcagct
52801 cagatccatc tcacagtggg tctaatgggc cccaatgcca tcctgtggtc atttccccag
52861 ttctggatgc acaattagaa tagacatact tagcagctca cagaatctct acattggttc
52921 cctgaatcgt ggagtaaggg ctattatggt gggaaaggcc aagtggaagc cactanaact
52981 gtgtctacct aggaaaatac taagccaaaa gcaatacgac atttctgggg gaactggaga
53041 ggtcataaag gacctgaagg gatcggggg tggtgattcc cccaccaggt ggttgaactg
53101 tgcgtttgct ttccaacttg gcagacacag ggggatcctt caaaatagca gtgggtgttg
53161 ggagccgtag cagggggaa cttcaagtgc acctggtgtg agatttggtt tttttctttt
53221 gacaaaaaaa aaccgttttt tcccaaggcg cgcggaccgg cggggcggtg cgtgttcgcg
53281 ccaaccctgc ntaagacccc ctcggcctct ttcgggggca acgacgaggt tggtaaccta
53341 tcaaaaaccc acggatcgga acgggtcttg caggtaggag aaaccgcacg aggcttagaa
53401 ttagcatgcc tgcggtttcg actctagagg atccccttgt taataaccag tatctattgt
53461 cttgtatttg taataaaaat atgatatact aaattcaaac aaagttctat attctaggca
53521 caaccagatt tttggataag tcaaatagcc atatagtaga tgcttgttga atctaataat
53581 aaacaccagc ttcctttgcc cttggatagg atgattctga ggcatggtgt tttactccgt
53641 ttgccatttc cctttcagga ttaaactcct tcagggttaa actccactgc cacctgtgag
53701 aataggtcta ataacgttct ttttatgggc tgctgttccc tccctgtatt actttcccac
53761 gttcctactg atatttcctg cacttctcaa taagttactt gcattggaat cattgtctca
53821 gggtctgctt ttacggaaac ccaaattaaa atatttctcc acaagaggt acatttcata
53881 agggcaggt cttgtctac tctttctttg tctgctttgt ccactccatg tccttacagc
53941 ctagcacaga gaggggcaca aaggaggtgc tcagtacatt tcagtgcatg agtgaaactt
54001 cactgaagaa ctttccttgc tcaagctgac aacctgctca ctgacattgt aacattggaa
54061 cccaattaac catccttcat ggggtaagaa ctttctgaca agaactnctg tagtccttga
54121 aattntctag tctaaacaag aaccatgtac tnganngatg gnntctaggt ttctggactg
54181 ggctctcaaa tctgattaaa ttaaggatnn ctatagcttt attnctagga gtaaagagag
54241 cattgatagt ccctgggtgt gaagtggtaa tagaggaatg canaaaagct gactgaatat
54301 tcctaatgat cactggnaca cacanngcan ggagtnggtg acttgggana agataccctn
54361 agctgaatgt aaaaaacctg cggctcggct ctgnaggatc cccccacac acacgtagag
54421 agaggaacta taagaaaatg tgtaaaatgt gaaggcaagt gggagttcat tgcatttgcc
54481 taacagcttt tccaaaaatg tttgacatgt ttccagataa aatagggtaa gagagaaaag
54541 ggaattatta tagactaaaa atacttaaca aacatatcaa acaaatgtaa tatgtgggcc
54601 atatgtgaat cctaattgca ataaaccaac tattaaaaac caatattttt gaggcaatct
54661 gagaaaactg aacatgcatt aggtattaga taaatattag gaattaacaa gttgttaatt
54721 ctgttgagtg tgataatggt acattgtggt tatggaaaga aggctttatc tgttaaagat
54781 gcataccgaa gtattggcaa gtaaacaat atgtcatctg ggatttgcac atgattcaga
54841 aaagaaatgt tttaaaatga gagaaatgaa acaggaatga cagaatgttc actgttgaag
54901 ctgggtaaca gatatattgg agttatttac actattagca tctcaacttt gtgtctgaaa
54961 attcttcata ataaaaaatt gttttaaaaa actaaaactc atgcactctg ctagagaata
55021 aaagaattct ttctgaaagt tanggataaa tcatttatat agatctgtaa attgcagcct
55081 ttatatctta cccttaagaa gctaagctgt ggntgctgc ntgtcacata cgcatgcaca
55141 acttacactt tncaaaagta ctctgagcca ctggtggcca aggtccagtc canaagtgga
55201 tgctggatga gtaggtactt ccatttgcca ncttattagc aggtaataac cttcaattca
55261 tatctaaaat catgtatgta gaatggtctg tcctaaccct tggtcctcta acaacatata
55321 aaagaagaat gggtagatac ttgcatgccc ctgcggtgcg actctagnag gatccccacc
55381 ataaaaaccc tagaagaaaa cctaggcaat accattcagg acataggcgt gggcaaggac
55441 ttcacgtcta aaacaccaaa agcaatggca acaaaagcca aaattgacaa atgggatcta
55501 attaaactag agagcttctt ctgcacagca aaaaaaaacg ggtaccgagc tcgaattcgt
55561 aatcatggtc atagctgttt cctgtgtgaa attgttatcc gctcacaatt ccacacaaca
55621 tacgagccgg aagcataaag tgtaaagcct ggggtgccta atgagtgagc taactcacat
55681 taattgcgtt gcgctcactg cccgctttcc agtcgggaaa cctgtcgtgc cagctgcatt
55741 aatgaatcgg ccaacgcgcg gggagaggcg gtttgcgtat tgggcgccag ggtggttttt
55801 cttttcacca gtgagacggg caacagctga ttgcccttca ccgcctggcc ctgagagagt
55861 tgcagcaagc ggtccacgct ggtttgcccc agcaggcgaa aatcctgttt gatggtggtt
55921 ccgaaatcgg caaaatccct tataaatcaa aagaatagcc cgagataggg ttgagtgttg
55981 ttccagtttg gaacaagagt ccactattaa agaacgtgga ctccaacgtc aaagggcgaa
56041 aaaccgtcta tcaggggcga tggcccacta cgtgaaccat cacccaaaat caagttttg
56101 gggtcgaggt gccgtaagca ctaaatcgga cccctaagga gccccgatta nagcttgccg
56161 ggaaaccgcg aactggcaga aggaagaaaa aacaaggacg gcctggggcc tgagtgtacg
56221 gtaccttgcg accccacacc ccggcttatc ccntcagggc ctctaggtgc tagaagccta
56281 agtcttgcat gcctgcaggt tcgactctag nagcatcccc tgtgtagaaa gatacccata
```

```
56341 acagaatatt cgggccttcc gcatgaacac ccagagaact caccctggaa tggcacaggc
56401 aggaacattc cggagccctt cacatccact tcccaaaaga tctctgtaat ctgcaaaata
56461 ggcacaaacc ctccagttag ggcaggccat ctgctttat gccttgccac cccaaaactc
56521 gctctaaccc acccaatcca attctcacct ccgtggcagc aactgtgtga cctgaagttt
56581 catcagtgca tgccagcagg tggtcagtaa ggggcaatcc tcctgcggct ttcgtggagg
56641 gactagagtg ggcagatatg gtcccaggtt cctctgcagg cgttgccagt gataatctcc
56701 aaccagcaga aagatggtga tggacctcga tggagagaga ctgggcacat tgtgtattca
56761 cacaataggg ttcccctcac ctgncaccca aacaaggaat acgccagcag gggcaatttt
56821 ctgaaagtta tctccttcgg gagctctgtt tgtgtttact gggacatggg acagtgtttg
56881 agtggatagc ctcttgcctt tatctctctg ctttgggagg atgagaggga agagagagaa
56941 aaggagaaaa aggagatgtt ggcaggctct taacaaaatc atgccaaaaa gaatggaaag
57001 attaagatcc ctttgagctt ttttacagtg gagaaagcta tatttgactc tgtagggacc
57061 ggaagctatt ggttaaatga attggaggcc aaccctgaac ccaggaacat tcgcaaccaa
57121 cctgccggag taagtccctg attgaggatg tggaaaaaaa cctccaaaca tggcctgtgg
57181 ttccctgggc tgggagttcc cagacacaca gggcttagct tgcataacct gcagttcgac
57241 tctagnagca tccccttggt tccaagtctt tgctattgtg aatagtgctg caataaacat
57301 acgtgtgcgt gtgtctttat atcagcatga tttataatcc tttgggtata tacccagtaa
57361 tgggatggct gggtcaaatg gtatttctag ttctagatcc ttgacaaatc accacactgt
57421 cttccacaat ggttgaacta gtttacagtc ccaccaacag tgtaaaagtg ttcctgtttc
57481 tccacatcct ctccagcacc tgttgtttcc tgacttgtta atgattgcca ttctaactgg
57541 tgtgagatgg tatctcattg tggttttgat ttgcatttct ttgatggcca gtgatgatga
57601 gcatttttc atgtgtctgt tggctgcata aatgtcttct tttgagaagt gtctgttcac
57661 acccttcacc cacttttga tggggttgtt tgattttttc ttgtaaattt gtttaagttc
57721 tttgtagatt atggatatta gcccttcgtc agatgagtag attgcaaaaa ttttctccca
57781 ttctgcaagt tgcctgttca ctctgatggt agttttttt tgctgtgcag aagaagctct
57841 ctagtttaat tagatcccat ttgtcaattt tggcttttgt tgccattgct tttggtgttg
57901 tagacgtgaa gtccttggcc atgcctatgt cctgaatgga ttgccctaag tttcttctag
57961 gggtttatgg ttgtaggccg acgtgaagtg tgtaaccctc ttgaataatg ttggataagg
58021 ggtaagaagg gatccatgga agtttcatct agggtacgcg tttcccaccc tttaaaagag
58081 gaatccttct ctgtttgttt gaaaatctca gaacaaaggt ggaatggggt tactcgaggc
58141 gtggcggggc ctatatcttg catacctgca ggctcgactc tagaggatcc ccgtgtaagg
58201 aagggatcca gtgtcagcct ttctacatat ggctagccag ttttgccagc accatttaat
58261 aaagagggaa tcctttcctc atttcttgtt tttgtcagat ttctcaaaga tcagatggtt
58321 ttagatgtgt ggtattattt ctgagggctc tgttctgttc tattggtcta tatctctgtt
58381 ttggtaccag taccatgctg ttttggttac cgtagccttg tagtatagat tgaagtcagg
58441 tagcgtgatg cctctagctt tgttcttttt gcttaagatt gtcttggcaa tgtgggctct
58501 ttttttggttt catatgaact ttaaagtagt tttttccaat tctgtgaaga aagtcattgg
58561 tagcttgacg gggatggcat tgaatctata aattaccttg ggcagtatgg ccattttcat
58621 atttattctt cctatccatg agcatggaat gttcttccat ttgtttgtgt cctcttttat
58681 tctgttgagc agtggtttgt aattctcctt gaagaggtcc ttcacatccc ttggaaggtt
58741 gggtgcctat gtattttatt ctctttgaaa ccattgtgaa tgggaggtca ctcatgattt
58801 ggctctctgg ttggctgggg gtgggggaat aagaatgctt gtgattcctg cccattgatt
58861 ttgtatcctg ggactttgct gaagttgctt atcagcttaa ggagatttgg gctgagacga
58921 tagggttttt aatataccat ctgggatctg caacgaaaca attgcctgcg gtttcctaag
58981 gaactcttta ttattcttct cccgaggcct tggcggactt cccccttgtt tatagagggg
59041 aagagggctg cctgcctgac atttcaagga agcctccatg ttgcctagct agacttgcat
59101 gcctgcggtt tcgactctan agaatccccc gacaaccata cgctgagaga ccctcactac
59161 gttgaagaca aaggccataa gtaccttgta ttcgaagcca acacgggaac agaaacgga
59221 taccaaggcg aagaatcttt atttaacaaa gcgtactacg gcggcggcac gaacttcttc
59281 cgtaaagaaa gccagaagct tcagcagagc gctaaaaaac gcgatgctga gttagcgaac
59341 ggcgccctcg gtatcataga gttaaataat gattacacat tgaaaaaagt aatgaagccg
59401 ctgatcactt caaacacggt aactgatgaa atcgagcgcg cgaatgtttt caaaatgaac
59461 ggcaaatggt acttgttcac tgattcacgc ggttcaaaaa tgacgatcga tggtattaac
59521 tcaaacgata tttacatgct tggttatgta tcaaactctt taaccggccc ttacaagccg
59581 ctgaacaaaa cagggcttgt gctgcaaatg ggtcttgatc caaacgatgt gacattcact
59641 tactctcact tcgcagtgcc gcaagccaaa ggcaacaatg tggttatcac aagctacatg
59701 acaaacagag gcttcttcga ggataanana gcaacatttg cgccaagctt cttatgaaca
59761 tcanagggca tanaacatgc gttggcanaa acagcatcct ggagcaagga cagctgacag
59821 tcaactaata acagcaaaaa gaaaatgccg atacttcatt gggcattttc ttttattct
59881 caacaagatg gtgaattgac tagtgggtag atccacagac gggtggtggc gccattgatc
```

```
59941  ccgtatccaa  tagtgcttcc  attagcgagc  caccagaact  gggcggcggc  aaaccggcgg
60001  aagggctcga  gaagggtgcc  ctagaattgc  atcaaccata  tacgctacaa  cagcattggc
60061  tttgaacttg  catgcccctg  cgtttgactc  tagaggatcc  ccanaatgct  ttcttcagaa
60121  gacagctgga  ttctcatatc  tgtttctgca  ctagtctgtt  tgatatcaca  tatcatgtag
60181  cctctggaga  gcactaatgc  acacttgaga  ggacgagatg  aaaaaggcga  ttgatgcctc
60241  agtgttatca  tgaaaactag  ttttgacctg  aaagaggctt  aaagtttcca  aaccacactt
60301  taagaatacc  cggtcaagaa  ttttctggtg  aaacttattt  atttactgtt  cttttaaaaa
60361  caagggtttt  ttaatatcca  tgaaaagata  actattgatt  cttatttggc  agtagagaaa
60421  gtcttaatgg  ttaaaaaatt  tgtagtttag  tgaaaatcat  ttctggggaa  atatatttgc
60481  ttccatattt  tttcctgcag  ctttcaatct  tgctggtaag  tacacttcta  cttagatgct
60541  ctttgctttg  tgacagagaa  actcatattt  ctgatttttt  ctttaactga  ggttttcat
60601  tcctgtgatc  tcaggcctgc  cgtgagccaa  gggactttgg  ctgggctgg  ggatgggatg
60661  agagggtggg  gaaagttaaa  gagctggatc  tgccgtttgc  tgagtgtgtg  accttcaccg
60721  atttacttag  tgaatccaga  aagaagcttt  ttattggaag  tngcccaaac  anacaaccaa
60781  ccaaccaaac  aaaacagaaa  acccagcctg  aaagcctaaa  caagaagaac  atgtattttc
60841  tcatatatta  tgaaggtgag  gtagaattct  ttagaagtgg  tggatcntgg  gcccataagg
60901  gaaactcagg  tcttgcatnt  tttactctgc  ctggtaacat  accagagtat  cttagctctc
60961  tgctggaccc  tgagtacgtt  ggaccaactc  tgaggaagaa  cggactgctt  ggaacttgca
61021  tgcccctgcg  gttcgactct  agaggatccc  ctaactaaag  cagaatttta  tctttcagaa
61081  tcagttaagg  gctttttgga  cagtgtaact  aactacgtca  tctgcacaca  gaaggatgtt
61141  tattttcctt  atttcaactc  atccaagggt  ggtggctggg  ctgttaggta  cagtttcaag
61201  agaggggaag  ccacaactct  ctgctctcct  agttatagca  acttaatgta  gatcctcaag
61261  agtcgaggag  tactgataag  cataataaga  aatagaaaca  caagtccaca  aagaggaagt
61321  acacttgggt  tgattttcaa  tttattattg  cagtgatttc  agagaatgaa  cctaatcaac
61381  tgatccaatt  gacattgaat  gtaattttga  ctgacaaggc  ttagtttacc  ccttangtgc
61441  aatgggttaa  gaacagagac  agagagcttt  tcaccaaaat  ccatgttccc  ctttcttgga
61501  ttggaggcat  tgttgggagg  tagattcctg  gctagaaact  atattcccca  gagcacctta
61561  taaccagatg  tggttgtatg  actagtcctt  attgatggaa  tatgagcaga  aatgaattgt
61621  gtcatttgca  ggctgaggtt  ttaaagaact  gagtgtggct  tctctatagg  gtagtccctg
61681  cttaatctgc  ggtttcgctt  tccattattt  cagttaccca  cagttcactg  tgggtcaaaa
61741  acattaatga  aaaatccaga  agtaacattc  atgtttaaat  gtgccgcttc  tgagtgaatg
61801  atgaatctgc  gctactacct  cgctctcata  gtacttaaga  gacactcggt  aaacaacagc
61861  tgtcccggtc  gcacactggg  tcacatactt  tatttactta  catggcccaa  ggcaagatat
61921  gaccggctta  gactatgcag  accctgcttt  cgactctagg  agatccccan  attctactgc
61981  tctggagcac  agaaggagaa  gggaggaggt  ggtcctttcc  cttggaagaa  ttggcacaag
62041  gaccccaatt  ctccctttgt  aaacctggaa  aagagagccc  cttgaaaaat  tttggggttt
62101  tcattctccc  tcctggagtt  gctctgaatc  ccatggctgt  ggatccctgc  ggagtggtga
62161  tataatggaa  atgagtcctc  aaatatctcc  atttgcacta  agcagttttt  gtgtgccatg
62221  tggctgtaag  tgtaagtact  atcatgcagg  aggtatgtcc  atttttact  taaatctgtg
62281  tccttatatt  aaaagtagtt  ggagtttaga  cccacatgac  agccaggcct  gatagttggg
62341  ttccctattt  catttgacac  tctcttttgc  cccatatgtc  tccacactag  gggttcagca
62401  gcctagccat  gggaatggac  ttcttagagg  ctccttcttc  ttggctgggg  gccctggacc
62461  ctgatgaggg  ctgcccagag  ccttcccctg  cagtgtcacc  ttcttgtgag  ctgagtctga
62521  ggaggtgctt  ggcttccccc  accgtgtaga  gatggtggcc  cgcgtggtga  cagtcatttg
62581  ctttccctgc  tttggntggt  tgcctcgctc  tgcctgctac  cttctttcc  tccagctctt
62641  tcttccacat  cacaatgcct  tggtatgatc  tcctcttccc  cccccatgat  gctagaaact
62701  gnctcttgtc  tcaccacccc  tttgtttctt  ttccaagatt  cctggctcct  cttcgagctc
62761  tctgactcca  agttaagccg  ggaggatttc  cttctctgca  gtaccggaaa  tgctctaata
62821  ccacttctgc  ttcggtggcc  acaaaattct  cccgcaagtg  gcccggatct  gtttaacttg
62881  cataccctgc  gtttgactct  agnagnatcc  ccctacctct  tgagtggcag  ggtttacatg
62941  cttgaagcat  ctttctgcct  ccctgtgatg  agggatagat  ttacggtttc  atccacagac
63001  tatgggcctg  gggcctgtat  tgtcttcaaa  ctctgccact  ttaaactttg  gtagaacttg
63061  ggttccccca  aaggagacgt  taagacaggc  tctagccttg  ggaaattagt  tcgcctccca
63121  gccatccctc  ctctcttccc  atagaaccct  agagccagtt  ttcaatgcca  gtctctcaga
63181  gaccctcacc  tcattttctc  tgccgacact  tttgcagata  agtctagcac  tgactagaac
63241  acaggttgta  gagggtacag  cataacgttt  ttgtgtagaa  agatacccat  aacagaatat
63301  tcgggccttc  cgcatgaaca  cccaagaact  caccctggaa  tggcacaggc  aggaacattc
63361  cggagccctt  cacatccact  tcccaaaaga  tctctgtaat  ctgcaaaata  ggcacaaacc
63421  ctccagttag  ggcaggccat  ctgcttttat  gccttgccac  cccaaaactc  gctctaaccc
63481  acccaatcca  attctcacct  ncgtggcagc  aactgtgtga  cctgaagttt  catcagtgca
```

```
63541 tgccancagg tggtcagtaa ggggcaatcc tnctgcngct ntcgtggnag gactanagtg
63601 ggcagatatg gtcccagttc ctctgcaggc gttgccagtg ataatctcca ccagcanaaa
63661 gatggtgatg gacctcgatg gagagagact gggcacattg tgattcacac aataggggnt
63721 ccctcacctg gcacccaaac aggaatacnc cagcagggg catnttctga agggtatctc
63781 ctcgggactc tggttgggtt acctggcatg ·ggacaangtt gagtgatagc tncttgctta
63841 cccttgcttg gagatgaggt ttaacttgca tgacctgcag gtttgactct agnagcatcc
63901 ccaaanagtt taaaataatc aatttaaaat gtcacttagt aattcctgag agtggcactg
63961 atacaagaaa agcatcctca aatagcatta aatttattat tagtcaccca taattaacaa
64021 tgggtaaatt tgggaacaaa tattatcaaa tacatgttta cagaatgctg tgaatacttt
64081 gagtaaatta atattaatag tggagaatgg tattcaaggg tggctaaaca tatttagaaa
64141 agagacaaca gagattcagt aaaggattac taattanaat caaatatata atatagtcaa
64201 ggcccatgat aattttaaag tgcggtttta ttaaggaact tcaggataag tgccagtctt
64261 attttagctt cttctggaag aaatactgcc aattataaat aatcacagca aaatttccat
64321 tagacaaaaa ctatatgtgt tggngggggg ttggatcatt tatatcatcc tgcaaatata
64381 aactcaactc ttgagctgta ttaacaacac tgagcaacaa tatttctta taaaattttc
64441 tttttttttt tttttgtgaa atggagtctc actctttcac ccaggctgga atgaaagggt
64501 gcgatctcgg ctcactgcaa gcttcgcctt cccagttcaa gcagttctcc tgcctcaacc
64561 tggcaagtaa ctgggactac cggtgcgcgc caccacccca actgattttt gtgtttaag
64621 ggaaaagagt ttaacatgtt gccaaggggg gctaatttcc tggcctgaga acacctgctg
64681 ggcctccaaa gggtggataa caggaggacc ctgaccagcc taaaattttt taggagatcg
64741 gtttactaat gggggcggga gatttacaat aaatggttta ttgtaaggaa caaaaagggc
64801 taggactatg catgcctgcg gttcgactct anaggatccc ctttcgcatc ggtttagtct
64861 tgactgattt ttgcattgat tagatcttgc actgaataag cttttactg tggtttttca
64921 ggcctgaggc aggtgacagt aaaacaacct gttgaggttg tttcagtgag attgttaagc
64981 atcatatgtc caagggaaat attaatttca ccaagtcaga catatgtaag acagccatcc
65041 tttcctctgt gtatcacaca aagctaaatg gatctattat ttgaaagaaa cttgaaagaa
65101 aattttgcat atctacaagg agtgtggtat gaaggaaaaa agattaacat atccaaataa
65161 tggtcctggc tctgtcacta actaaccttg tgatcctggg caggtttaac actctgggcc
65221 ccagtttaca gacacctact gcctccagaa cagttcttcc cagtctgact tcttaacccca
65281 tcgtattcag gctttcatcc ccagcacaac ctacctgccc attgagaact gttagtgact
65341 ccaaatggtc catcccggtg gcttcttacc tggtcttgat ctccttgact tcagagagag
65401 tggcacttgg cattgtgggc catcgcctct gcagattctt cttcttcttt ttttttttt
65461 tttgagacgg agtcttgctc tgtctcccag ctggagtgca gtggcgcaat ctctcactgc
65521 aagctccgcc tcccggttta cgccattctc ctgcctagcc tnccgagtgc tgggactcgg
65581 cgcccgcacc agcccggcta attttgtat tttgtaggga caggttacc ggttaccaga
65641 cggctggttt gtgactatga tcggcgcctg actnccaaag ctggatacag cgcagcacgg
65701 ccggccaatt tttgctagac ttgcatgcct gcaggtttga ctgctaaaga atccctggt
65761 tattttcaca attgttttct tgagtattaa tttttcacgg gtaccgagct cgaattcgta
65821 atcatggtca tagctgtttc ctgtgtgaaa ttgttatccg ctcacaattc cacacaacat
65881 acgagccgga agcataaagt gtaaagcctg gggtgcctaa tgagtgagct aactcacatt
65941 aattgcgttg cgctcactgc ccgctttcca gtcgggaaac ctgtcgtgcc agctgcatta
66001 atgaatcggc caacgcgcgg ggagaggcgg tttgcgtatt gggcgccagg gtggttttc
66061 ttttcaccag tgagacgggc aacagctgat tgcccttcac cgcctggccc tgagagagtt
66121 gcagcaagcg gtccacgctg gtttgcccca gcaggcgaaa atcctgtttg atggtggttc
66181 cgaaatcggc aaaatccctt ataaatcaaa agaatagccc gagatagggt tgagtgttgt
66241 tccagtttgg aacaagagtc cactattaaa gaacgtggac tccaacgtca aagggcgaaa
66301 aaccgtctat cagggcgatg gcccactacg tgaaccatca cccaaatcaa gttttttggg
66361 ggtcgaggtg ccgtanagc actaaatcgg aaccctaaag ggagcccccg atttaaagct
66421 tgacggggaa agccggcgaa cgtggcgaga aaggaaggga gaaagcgaag gagcggcgct
66481 agggcgctgc agggtgaacc ggaacccctg cgtaaccac acacccgcgg ggcttatgcg
66541 ccgctacagg ggcgtactat ggtggcttga caagcacttt aacgtgcttt cctcgtagaa
66601 tcagacggga gctaacagga gggccgttaa aggatttanc acggacgtac ccacaatctg
66661 ggaagggttt ataataagga ggcacgctag acttgcatgc ctgcagttcg actctagagg
66721 atcccctatg gtaaactatg gactttgggc attgatgacc tgtcagtgta ggctatcaat
66781 tgtaacaaat gtaccactgt agtgggagat gttggtaacg ggggaggcaa tttattgtca
66841 gtggggcggg gggcagaag atattaatat gtgacatatt tctgcaatct tcctctcaat
66901 tttattgggt acttaaaact gctctagaaa actaaagtct ttacatgaaa tgttttttc
66961 cacagagaga aagaacccaa taagccatta accccattgg cctgagatga ataaatttat
67021 tggagtgaat tcaatgaaca cctctttagg gacctacggt tcacaaagct ctgttctggg
67081 tgttgagaca tttggatgaa taaggcacgt tgcccttagg tccacagtct agaagggaag
```

```
67141  acacaggcac ctcaccaatt ttaacaaagt tctagaagta acgtggaggg aagaatttgg
67201  aaagggagct caacaaagaa ggtgacactt agttgggctt tgagaaataa gaaagactaa
67261  gcagatcttc tgtangcaga aggaatgata cagggagtgc aagaagaaag aagcatttta
67321  cccaaatgga agagcatgac agcanggag agaagaagaa tctttatgat gtattgtgag
67381  gattactact attccagtgt gattagagcc aagattacgt gagcttgana agaaagtcan
67441  gggtgggaa ccaagaccaa cagtgaccgt aattgttttg ggataataat agctatngta
67501  gtacatggtc ttgtgaattg gtggagaact ctgtagaata gattggaagg ccaagtgtgt
67561  gctcatgcct gtatcccgaa ctggggaggc tggtgggagg atctcttgnt ccangagtac
67621  agaccactag gcacatgtga gacttggctc tctcgctaga cttgcatacc tgcggctcga
67681  ctctagagga tccccagtgg cagggtttac atgcttgaag catctttctg cctccctctg
67741  atgagggata gatttacggt tacatccaca gactatgggc ctggggcctg tattgtcttc
67801  aaactctgcc actttaaact ttggtagaac ttgggttccc ccaaaggaga cgttaagaca
67861  ggctctagcc ttgggaaatt agttcgcctc ccagccatcc ctgctctctt cccatagaac
67921  cctagagcca gttttcaatg ccagtctctc agagaccctc acctcatttt ctctgccgac
67981  acttttgcag ataagtctag cactgactag aacacaggtt gtagagggta cagcataacg
68041  tttttgtgta gaaagatacc cataacagag tattcgggcc ttccgcatga acacccaaaa
68101  actcaccctg gaatggcaca ggcaggaaca ttccggagcc cttcacatcc acttgccaaa
68161  agatctctgt aatctggaaa ataggcacaa accctccagt gagggcaggg ccatgtggtt
68221  tgatgccctg gcaccccgaa actgggtgta acgcgcgcaa tgcaattctc acctccggtg
68281  gcagcacctg tgtgaccctg aagttcctca atggctgccc acaggggggtc aattgagggg
68341  ccatcctcct gcagcgttcg gtggaggact aaagtgtggc aaatatgggc ccacggctcc
68401  ctctgcgggc gttggcccgg ggtggtgcgc acaccaggta aaaanatggg gcgtggcacc
68461  cgtggggacg gagagctggc caccttgggt ttgtcacgca ataagggtgt cccgcatccg
68521  ggaagccgac catggaatac cgccgcggcg ggcatgtttt ctgagaggtt tcctgcttag
68581  gacgcgcggg cgtctgtgcg ggcgagggga aggagtcaga agagaggtcg tgctggcctg
68641  nnagtcttgc aatgacccct gcaggtttcg agctctagaa gcatccccgt acattgccct
68701  ttcctaaaca caagtgacca gtttctcctt tgctgtattg ggaggacttt ccaccaagtg
68761  ccatctattt ctcatccatc tcctttgaaa tattttcact ctttatctac ttctcctctg
68821  ggctggtaga tatttctaag tcattgtata gtgcatggat tttatttttca ttttcgtttg
68881  atcagaaaat gagtcgagaa gatatgacat tgttgcatat gtggttgatt ttcatttctc
68941  tttttctcat ccttttggtg acaaacacca ggagctgctt ctttttgtat aagaagtcct
69001  tcagcaccta tactggtcat catctgaagc gcatgctctc ttgcggtccc tttgatagag
69061  caagagcacc acccacagca acaaaacatg ccctgagtct ctggagggag cctggacagt
69121  taatgaaacc cagggccaat ggaccacaaa gcccagtccg taatcagagt gctgcatcaa
69181  ttgcgcacac tcaagtgtct gattccatcg gttcagtttg gtatctgtat ggcgtctgtc
69241  tatttgtatg ataccttggt aatctgactc atgaattaga ccagaccaaa gcaacctggg
69301  ggaaaggcgg agtatttgtg ggtaaggaaa catgccttcc accttgttct aaaaccaaca
69361  ttagtagtac attcagtatt cctaaaggat aattttttcca gtaccctgtt aaataaattt
69421  gatttggccc aggctactgc ttaaacatac ccgggggggac ctcccttctg acaggaaagc
69481  tgctcttact ttttggttac ttcaatcaaa tttggttcta tctaagaccg ctcgctttgt
69541  ctcaggcaca aggctcaaaa acctttaaat tgcatgcatg cagttcgact ctagaggatc
69601  ccctgtcctt tgcacaacat ggatggagct ggaggccata atcctaagtg agtgaatgca
69661  ggaacagaaa accaaatgct gcatgttctc acttaaaagt gggagctaaa tattgaacat
69721  acatagacat aaacatggga acaacagaca ctgcagacta ctagatggga gagggtggga
69781  gggaatgagg tgaaaaacta cctattgggt actatgctca tgacctgggt gcagtccatt
69841  tatgtaataa acctgcatat gtacccctgt atctaaaata aaagttgaaa tttttaaaaa
69901  atctttataa atctagataa gaaactgtta acttttcacc atttaacaaa agtaaatgtc
69961  ttacaagaaa aatgttttaa agggataatc tattgtctag aagaaagatg acaaaattat
70021  atttaaaaag agaaagaaag ggccgggtgt ggtggctgca cgcctgtatc ctagcacttt
70081  tggacacaga ggcaggagga tcacttaagg ccangagctc gagacaagcc tggccaacat
70141  ggctntctac taaaaataca aaaactcaac aggcgtggcg ggtggcaccc tgtggtccca
70201  gctactaggg aggctgaggc aggagactca cttgaacncc ggaggcgggg gttgcagtga
70261  gccgagatat gccactgact ccaacctggg aacagagaga gattctggct gtgggaagaa
70321  aaaagaatgg cggatgaatg aatgaaagaa atcgggatga aaaggcgacc tggaagccag
70381  acaaacatta ggaaatgcgt taacattatc ctgtgaatga caaggtttgg cttttggaaga
70441  ggcgggattc accagagtag ggggagctag acttgcatga ctgcagtttg actctagagg
70501  atccccttct ttttaatcac tgaaaaagtt ctgactgata aaacgtttta aaaaagaact
70561  tggagtttta gctggaaaat tagctctata gaaataaaca gcgttgtaat aaattagtag
70621  gaagtctggc tgaattacca aatctagtag ccatattgag ggcagtgata ggccttttcc
70681  attcttaact ggtcagtgtc atattgaggt ctatggtctc aattaaacag gggtatagtg
```

```
70741 gctggagaac attcagaggt gagtgactgg aggtatgaat ggactttaat catgtcacgt
70801 gaagaatggt tgaaggagat aaatgtgtct actctgaaga ttattccagg ggtcatgata
70861 gtagccttca gatagttaaa gagtttttt aattaaaaaa attgtgcagg aggctgaggc
70921 aggagaatgg tgtgaatccg ggaggcggag cttgcagtga gccaacatcg cgccactgca
70981 ctccagcctg ggcaacagag cgagactctg tctcaaaaaa gaaaaaaaag aatgtgggaa
71041 aagatacata aaatttgaaa tgttaccatt taagtgtact tacagttcaa ttgcattatg
71101 tccattcaca ctggttgggt aaccatcacc taaactcatc tttgcatctt ccaaatctct
71161 ggcctcatta aactgtaact tcccattctt gcccttccca gtccctgaga accaccattc
71221 tgctttctgg ctatgaattt ggctactaaa ggcccctcag gttggtggaa taataaccgg
71281 tgcgcttcgn ggactggctt atttcactta accaaaggtc ctcaaggtca tccctggtgg
71341 aaagagggga aaattatctc ccttgtaaga tcactatatt taatgggagg gagccaacac
71401 gtgtgggttt tcttacctgg cagggaacac tgcgaggtca caatttgggg gttggacttg
71461 catgccctgc ggttcgactc tagaggatcc ccttaagcag atctaacaag actctaagct
71521 actcttggac agctctgctt aggggctgag ccaccttccc tcaagaactt tgttgaagag
71581 tgttgaacga cctttttgga agccttctac ttgcaacatg aattaaacag cagttacgat
71641 cactgggatt aataatgtga tgtctggagc aggtaatccg gaattattaa tattatctct
71701 ctgtcatctt tttctttct ttttggaggg gaggggggaca ggatgtcact ctgtcaccca
71761 ggctagggtg cagtgatgtg atcatatctc actgtaacct tgaacttctg ggctcaagtg
71821 atccttctgc ctcagcctcc aaagtagctg ggactatagg catgtgccac cacacccagc
71881 tactttttaa actttttgta gaaatggagt ctcgctctgc tgcccaggct ggtctcaaac
71941 tcctgggttc aagtgagcct cccaccttgg cctcccagag cactgggatt acaggcatga
72001 gccagtgtcc agtcttgtca ttgttttgct ttttctttct tttttttctt cagagagggg
72061 ggtctcactt tgttgccagg ctggactctc aaacttctgg gctcaagtga tcctcccacc
72121 tcagcctcct gagtagctgt gaccactggc acgcgccact acaccaacct ctctggcatc
72181 ttacacgaga gagcatgtct taggctgaat gcagtgggtc atggcctgta tcccaacact
72241 ttgggaagcc gaggcaggca gatacctgga gtcgggaggt tggaccgcct ggacaaacgg
72301 gaaaaccctt tctactaaag tacaaaatta gccggggtgg agggccctgg ttggaatccg
72361 actctgggga aggtgaggca ggaaaatcat ggaattgggc tagacttgca tgccctgcgt
72421 ttgactctan aggatccccc cagtgtactt cctctttgtg gacttgtgtt tctatttctt
72481 attatgctta tcagtactcc tcgactcttg aggatctaca ttaagttgct ataactagga
72541 gagcagagag ttgtggcttc ccctctcttg aaactgtacc taacagccca gccaccaccc
72601 ttggatgagt tgaaataaga aaaataaaca tccttctgtg tgcagatgac gtagttagtt
72661 atattgtcca aaaagccctt aactgattct gaaagataaa attctgcttt agttatggca
72721 atgctagctg ctttaactaa taatcccaaa aagttaagat tgactattcc aaaaccaaaa
72781 ttgttatttc tggtaaatgc tctccaaaga ttaattgggt taagtcctaa caaccataca
72841 gcaaatcaaa tagagtcaca cgctgcataa tgacatttca gttaatggca gactgcatgt
72901 gtaatgatgg tcccataaga tgattatatc atatttttac tgtacctttt ctatgtttag
72961 atacataaat acttaccact gtgttacaat tgcctacagt gtctagtaca gtcacatgct
73021 gtgcatattt gtagcctaga agcaataggc tctaccatat agcataggtg tgtagtacgc
73081 tctacatcta ggtttgtgta tacactctat gatgtccaca catggatgaa tcgccaaacg
73141 acacatttct cagaaagtat tccatcatta aatgatgcat gactggtagt ttggttacct
73201 acagaatatn ggnaaactag tcaccctaaa ggattcctat ggaataccat ggtaaaatac
73261 tatttataag tgttggagaa atttagtcat ggcagagttg gatctctgct taatggttaa
73321 aggngaacga attattgtat ggcctatntg caggctagga tcttgcaaac ctngccgttc
73381 gacgtctagn agaatccccc ccccaccgtg tagagatggt ggcccgcgtg gtgacagtca
73441 tttgctttcc ctgctttggt tggttgcctc gctctgcctg ctcccttctt ttcctccagc
73501 tctttcttcc ccatcacaat gccttgttat gatctcctct tcccctcccc atgatgctag
73561 aaactgcctc ttgtctcacc acccctttct tcttttccca agattcctgc ctcctcttcg
73621 agctctctca ctccaagttt aagccgtgag aatttccttc tctgcagtac cgaaagatgc
73681 tcttaatacc agctcctgct ccagtgggcc caaaaaattc ctccaggcaa gtgggcacag
73741 agatcatctt gagaactgaa taagtttaaa gggggagaaa gtggcattaa ttgagcccta
73801 actctttgct agggaacttg catgcaatat acatctaatc ttcacagcat tctttttgaga
73861 tcctttacta ccgctttgta gatgagaaaa ttgaggctca aagaaggtaa gtgcctaacc
73921 tgaggcctca gttagtgaat ggcagtcatc atctttttccc agtctgtctg actctggagt
73981 cattctcatt tctacacttc cgcccctcgc tgaatccaca gtaatcttca cattcacctc
74041 tggctaatgc aattccatct tgattcttaa gaaatatgat gtgtcaggtt gaattctaaa
74101 cacagcatct ggattaatcc ctttcctgct gcctggtaag aatatgagaa actggaacca
74161 aaagggttta attggactac agttcacatg gctggggagc cctcagatct ggccggagaa
74221 ggaagcactt cttactgtgg tggcaggaaa aatagaagga gcaaagcgag gtctgataac
74281 cgtcgactat gagactangc tttatattgc atgacctgcg gttcgactct agaggatccc
```

```
74341 cttttttatt aaaacatgct gcatataatt aatcactcat aaatatacat gtggtgagat
74401 gtctgtaaaa gacacacata taaaacaagg tcatgtattg tttggtttat gaaatgttgt
74461 gaccagaggc tggaaggagc ctggctcttc ccaggagcag tgattcagtg ttcactaatt
74521 cattgtctgc agagactta tagactagac cataactagg ctgaataaca agaattgact
74581 gtttcctgtc ttgtttactg ttgtctctcc cactanacag tgtggtgtac aaggacaggc
74641 gttatgtctg ttttcctcac ccctagatcc ctgcaacccc tggcacatag taagtgccaa
74701 taagtgattt tttgtttgaa tgaatgaatg aaagaggagg agaatcatga aagtgtaggg
74761 tcatagaagc caggagagtt tttagtacta acgagtcatt aacaacgtan acaaagcaga
74821 gggattggtg agggaaggag gggaagtgcc catttgctgg catatgggag cctgggagac
74881 tggtttcagc tgagaaagga ngggaagtgc ccattagctg gcatatggga gcctgggaga
74941 ctggtttcag ctgaggaagg anggcanaag ccangctgta ncaactgagg aatggacant
75001 gaggaanaag aaagagtgta ggctacattn ttgaaagttt gggtgagaag gggaggaaag
75061 ggttntgata gaagctagag gacacctgat caggg ttggg gtggttcaaa ctgggagagt
75121 gctctcatat tataagcttg ggggcagctc canaggaaga anagctgggc gtgtacacct
75181 ggaagaagga tgtggctagg gcaaaggtac tctgacaaag aagaagacta actgccagct
75241 aggaaagaaa atggttattg aatgaatgct tatcttgcat gcctgcagct cgactctaga
75301 ggatccccag acctattcta caggtggcag tggagtttaa ccctgaagga gtttgatcct
75361 gaaagggaaa tggcaaacgg agtaaaacac catgcctcag aatcatccta tccaagggca
75421 aaggaagctg gtgtttatta ttagattcaa cacgcatcta ctatatggct ctttgactta
75481 tccaaaaatc tggttgtgcc tagaatatag aactgtgttt gaatttagta tatcatattt
75541 ttattacaaa tacaagacaa tagatactgg ttattaacaa gccaaaacta cagagattga
75601 tacagaacaa gttagaaatc tgctactcta atcacagtgg cctgagggaa ccaatattag
75661 cagtttagta cgtatctttc tacatctttt tcagtgttcg tctgaatata taaaaataat
75721 gtatacagtg agtggtttcc ggtttataaa aacacgaaca aatgaaatat ataacttgtt
75781 tattncattt aacaatagat tagtgacatg tcaccagata aatacacaga agtatgtatg
75841 tcagatgtgt aaatctagag tacgaattta ctaccattta cttagctgct cgctgaatga
75901 agtacacttc gggtgatgtt tcagggttta ctacatggga ctgctacaat agacaccgcc
75961 tgtggacagc agactggttg taatgtttat accccaagag cttcgagcct tggaaaggag
76021 acctctccaa aggacacctc ttacgcaatg ctcccggtta aatgggagaa acggggtcta
76081 aggggaaggg aacaaaactg gccacatggg atatatacgt tccacannaa agcgccaggn
76141 agcggccgcg tcaaattnta agctgctggt acattggaat ggactgtttt gcgacataga
76201 cacgaggcat ggctacttcc gcagaggcgn cggcaatggg aacgcgtgtg gggtggctta
76261 acttgcatgc ctgcagtttg actcttanag natccccata taattcttta atccatcttg
76321 aattaatttt tgtataaggt gtaaggaagg ttttataagg ggatttccc cctttgcttg
76381 gcacttctcc ttcctgctgc catgtgaaga aggatgcatt tgctgcttct tctgccatga
76441 ttgtaagttt cctgaggcct ccccgacact gcagacctgt gagtcaatta aacctctttc
76501 ctttataaat tacccagtct tgggtagttt ttttgtagca gcatgagaat ggactaatac
76561 aggtaggtag aaatctttaa ttttatgaag gattatgcta gccttgctgg cttttggaaa
76621 ttgaaaagta agttaagtgt tgttatgaaa ccatccttcc tccaatcttc cttactttct
76681 tctgaatcaa atacatgact ccacctacct ctcactttcc aggaatggca ggtgttggag
76741 tcaggcattt gccattttaa ctgccaactc tggaaaatga ggaattggtt tgtttagtct
76801 ggagcagagc agaatgttca tgttcagttg aacatgatag ctgttttcaa ttntgaaaaa
76861 gctggaagag agtttagact tgntttcttt tctttctttn tttttctttt gagacagagt
76921 ctcactctgt tgcccangat ggagtgcatt ggcatgatct tggctcactg caagctccgc
76981 tttctggggt ccgaccattc tcctgcctca cctnctgagt agttgggatt acaggtgcct
77041 gccacctgcc cagctaattt ttgatttnta gtagaaatgg gttcaccata tgggtaggct
77101 ggtctggact ctgacctcag tgatcacctg cctancctcc aatgctagat ataagtgtga
77161 gcactgacct gactangact gtgtctgtaa tcacaagaaa acantccgng ggataaatgg
77221 aatangttta acttgcatgc ctgcagtttg actctagnag aatcccctgt agtgtaagct
77281 gagtgtgcag tgtttataaa gtctacagta gtgcacagga gtgtcctagg ccttcacatt
77341 caatcaccac tcactcattg actcacccag agcaacatcc cgtcctgcaa gctctattta
77401 tgctatgtgc cctacactag tgtagcacat tttatcgtct ataccatatt tttgctttac
77461 ctttactatg tttagataca caaatgctgt ggtacaattg cctacagtat tcagtacagt
77521 aacatgctgt acaggatggc agcctaagag taatagtctg taccatgtag tctgggtgtg
77581 tagtgggcta taccatctaa gtttgtgtag atacactcta tgatgttctc ataacgacaa
77641 aatcacctac tgacaggttt ctcagaacta tccctggcat taagtgactt atgactatac
77701 atagtgtgat tacatttttg taaataaaaa atacatgtaa ctccagcact gtgctcagaa
77761 cagttggtgg tagttaaatg ttaaaatctt tctatgccct cagatcaaca aagatttctc
77821 cattctcact gctctaatca ttcctcagga acacacacat aagaccagca agtacaaagt
77881 catctaacct gcctagatgt taggcctgtt tccatcctgt tccaagcccc tgaaaagtag
```

```
77941 gtgttacatg ctcatatatc atccttgacc cantccattc tcatggaagg gaacttccac
78001 ggggggaggg gaggagagga tanaagggcg attcacttan ntaatgagca acaaaaggcc
78061 tgagtgtagc caactcaaca gatctgcgaa atttcagtca ttgctcaggt ctttcttggt
78121 cccanccata gagaacaact gtgganattt agaatggact ggtagccggc accaaccctg
78181 cacccgggcc tagacttgca tgcctgcggt tcgactctag aggatcccca tcattgaaag
78241 tagacatttt ccagccagtg tggtggctca cacctataat gccagcactt tgagaggccg
78301 agatgggtgg atcacttgag gtcaggagtt tgagaccagc ctggccaaca tggcgaaacc
78361 catctttact gaaaatacaa aaattagcca ggtgtggtgg cggcaccta taatcccagc
78421 tactcaggag gctgaggcag gagaatcgct tgaacccaag aggcagaggt tgcagtgagc
78481 caagatcgcg ccattgcact ccagcctggg ttactaagca agcaagactc tgtctaaaaa
78541 aaaaaaagaa aaaagaaaaa agtaagtgtt ttcctaagag cagatgttga tcctaagcaa
78601 gtaagaaagt agaagaacat aagctacatt aggaaaaaag tgaattaacc attttttaaa
78661 aaaagaacaa atttcagaaa ggcaggctga gggaaagttc atctacttca aaacactcct
78721 agaaccagct ttgaacagaa tagttcccat tttgcaatac cacccactta gcaaagaaaa
78781 tccaattctc tangcctcat ggtggaaagt aaaactaagg ggaaaaaga aagtacaaag
78841 ataaggagag ttcaaaagga agtaaaatat ccagaagagt cctttccaat ccagtactca
78901 actcagaggc ctcatgtact gatcaaatcc tagcctgcat tgttttccac gttttctgca
78961 gcaaacatga aatctgcctc atgctgaagc ttaagcttct gtaatagttg aattgttaag
79021 gccaggcaca ggggctacat ctataaccag cactttggaa gctgggcggt aaacacaggg
79081 gagagttaag acaaccgggc cacggggaga cctgcnctac gaaaacaaaa tgctttaact
79141 tgcatgactg cagtttgact ctagaggatc cccttgtttg agttcattgt agattctgga
79201 tattagccct ttgtcagatg agtagattgc aaaaattttc tcccattttg taggttgcct
79261 gttcactctg atggtagttt cttttgctgt gcagaagttc tttagtttaa ttagatccca
79321 tttgtcaatt ttggcttttg ttgccatagc ttttggtgtt ttagacatga agtccttgcc
79381 catgcctatg tcctgaatgg tatcgcctag gttttcttct agggtttca tagttttaag
79441 tctaacatat aattctttaa tccatcttga attaattttt gtataaggtg taaggaaggt
79501 tttataaggg gattttcccc ctttgcttgg cacttctcct tcctgctgcc atgtgaagaa
79561 ggatgcattt gctgcttctt ctgccatgat tgtaagtttc ctgaggcctc cccgacactg
79621 cagacctgtg agtcaattaa acctctttcc tttataaatt acccagtctt gggtagtttt
79681 tttgtagcag catgagaatg gactaataca ggtaggtaga aatctttaat tctatgaaag
79741 attatgctag ccttgctggc ttttggaaat tgaaagtaag ttaagtgttg gtatgaaaac
79801 ctgcttcctc caatctagct tactgtcttc tgaataaata catgactcca cctactctca
79861 ctttccagga tggcaggtgt gggggtaggg ctttggcact ttaactggcc actctggaaa
79921 atgaagaatg ggtttgttta gtctggagca gaacaaaatg tcatgtgtca ggtgaactaa
79981 agctggtgtc attttggaaa gctggagaga gtaaggctgg tgtctttctt tttttttttt
80041 tttgagacaa actactcttt gccagaggga ggctgacata actgggcgcc tagacttgca
80101 tgcctgcagt ttgactctag aggatccccc aacatactgc attgtggacc aggttcccnc
80161 acatgaaatt tgagggaaca cattcgaact atagcatgta gcttgaatgt agttgaaatt
80221 gggtatactg attccttcca ctttattctt tttcaaaatt gttttaacta tcctagttcc
80281 tttgtatttc tatacacatt ttagctaatc ttgtctatat acacaaaaaa tcttgctggg
80341 gtttggtaga aattgtggtc tccatctcat gccaagatgt ctcttcagaa tttgcgctaa
80401 atctgtacac agatttgaag agcactgcat gtttactatg ttgagccttc tagtccacaa
80461 acatggtatg cctttccatt tattaagatc tttgatttat ttaattagca ctttatagtt
80521 ttcaacatac aagttctgta catattttat tgtatttgca cctaaatgtt tctttttatt
80581 gagtgatttt aaatggtatt atggtttaaa attttgatgt ctgcatgttc attgtttgta
80641 tacaaaaata aaatctatgt cttgtaccct gtgaccttgc tgaactcact tagttggagg
80701 agtatgttgg taggttcctt aggagttcct atgaagacaa tcaaattgtg caaaaagtaa
80761 tagttttttct ttcttgctct tcaagatgta tgctttttgg ccgggccagt ggctcacacc
80821 tgtnatccca ncactttggg aggccaaggt gggaggacac ctggaaggca gaagtttgaa
80881 agaacctggc aacttgggga aaccggcctt ctaaaatccc aattanctgg gagcaggggg
80941 acacctgtaa tccagtactt agagtttaag caaattgctg acccgggggg gggntgtgca
81001 gggccaagtg aaccctgacc caattggata aaacggcctt gactatgcaa gccctgcggt
81061 tcggctctan aggatccccc cttttctttt atatatgaat tttacataca ggaacaatgc
81121 tgtactgtct tacttgtttt attttgaggg ttttttttttt tctattttct acaaggacaa
81181 atgtaccaac ttaaaataaa ttttggaacc ccatttggag ataaatctgt cattcctccc
81241 taaacctcag ttagagacac ctcaggaaaa ttatttaaa cttaagaaat atttgggcca
81301 gatgcagtgg ctcacgccgg taatccccgt acgttgagac attgacgtgg aaggattgct
81361 tgagcctaga aggtcaaggc tgcagggagc catgatcaca ccactgcact ccagcctggg
81421 caacagagca agatgccgtc tcaaaaaaaa aaaaagaaa gaaaagattt gttcagtaat
81481 catttggtta tgcatttcan aattgctgtt taatatcttc ccggtaccag gtacagtggt
```

```
81541 tggtaccgag gattcagtga tgagcaggag agatgtggtt ccttccactt cgaattatag
81601 cttagaagag acaattttag acacgtgatt atgctcaatc aatacataat tgtaaaatat
81661 taaaagaatt actaggagaa aaatgaagga tgatgaaaaa ttataacatg gacatccaag
81721 ttacaatgga gggtcagaaa gtgttccctg aagaaattta tatgtaacct aggctctcaa
81781 gatagatgta aattagccag catagcatgg tattttatga aaacaatacc aagggaattc
81841 tggtttgttt ctctggggcg ggtggtttct ttttggagat ggagtcttac ctttggcacc
81901 caggctggag tgagagggga caatctgggt acatgtgaac tccacctgcg gggttaaaga
81961 catctccgtg ctcaccctct gagtggctgg gaacaaaggg cggcccacat cacgggtaat
82021 gtcagcttta acttgcatgc ctgcggttcg actctagagg atccccagga tgcttttaca
82081 ctgttggtgg gagtgtaatt tagttcaacc actgtggaag acagtgtggt gattcctcaa
82141 ggatctagaa ccagaaatac catttgaccc agtaatcccg ttactgggta tatacccaaa
82201 ggattataaa tcattctact atgaagacac atgcatgcgt atgtttattg cagccctact
82261 cacaatagca aagtcttgga accaacccaa atgcccatca atgatagact ggataaagaa
82321 tggatagaat ggacatagac accatggaat actatgcagc cataaaaaag gatgagttca
82381 tgtcctttgc agggacatgg atgaagctgg aaaccatcat tctcaggaaa ctaacacagg
82441 aacagaaaac caaacacttt catgttctca ctcataagtg ggagttgaac aatgagaaca
82501 catggacaca gggaggggaa cataacatac tggagcctgt tgcggggggt gggggactag
82561 gggagggata gcattaggac aaatacctaa tgtanatgac aggctgatgg gtgtagcaaa
82621 ccaccatggc acgtgtgtac ctatgtaaca aacctgcaca ttctacacat gtaccccaga
82681 acttacagta aaaaaaataa actttaaaaa ggatatgaac tctttgttnt ataaaatgta
82741 tattataatc aggcacagtg gcccacacct ataaccttaa ctctttggga ggctgaggca
82801 ggcaatcact tgagctcagg atttgagacc agctggacac acggcaaacc cattctaaaa
82861 agacattaca aaatagccaa tggatggtgg ggggggcatg cctgtatcca ctactggaag
82921 ctgaggcagg gtcattgaac cagagtcagg ctgaatagcc atgctagact tgacatgccc
82981 tgcggtttcg actctagnag gatcccctgc agtggtgttg aggtgactat gtagaaagtg
83041 cctgcttctg gtgccacttt catctcagct gagaaccaac acatgaggag cttcctggga
83101 gcccagccag gttcctctgt ggccaccgct acagtggtga cccctgacca gccagaggcc
83161 agccccaggg catggagtcc tgggcagaga ctggcagcga tggtggcagg gcaggtgatt
83221 agatactgaa agtatgtagg agggtgctat gggcaggtgg agatgacaaa acaagccttg
83281 ctcactgcat agctttgcag agaaactggt gcagagaaac tgaagccaag gttagaggga
83341 tgaaaacaga gcagtttcca gatcacttct gttttcccct tacatcaggc acacatgtca
83401 atcctgaaag tcccaggtgc ccacttctgc tgtacttggc acatggaaat gctgactgaa
83461 accacagtca gggcagcaga aactattctc acagggtcct ggcagtagct cagacaggtg
83521 ccctttctgg gccaacagaa atcaactgtg ggggtgtctg tgctgaagac agagacgggc
83581 tggcaagttt atgcaaagga tgctctcctt gaaaaaagaa tgataactct tagttaatca
83641 ttccccttga aaatagaaag cactcggtta cacattagtg attattattc tttcacccta
83701 ctccttggtt ttgccctctc tggacataga tttcttgagc ctatttctga ttggttgggt
83761 ggtgtgtatt gacgtggact ccctttgtga tagtgatgca ggtnatgagc actactttac
83821 tgccggtgta gattcaggac acctgaatgc tctgtgggga agattggaac agaaaaggca
83881 aaatcagggt caagacttga agctttccag cgcctagact tgnctgacct gcattttcga
83941 ctctagnaga tcccccttggc aaaataaacc tgcagtcaat taagatctac ctcagtcact
84001 ctttggggta tgctgtaatg gacagcagag gtccaagcag caatcagagt tgtctgagtc
84061 atagaaacct atggcattgg ctagttgatc atggcgtttc tcaaagtaaa atagatagga
84121 agcctatgaa attcttaatc tgcataagca gaaaagctct aggttaagtg acaaaagtct
84181 aacacgaatc ataaaaacag agaatcatga tccctcaatt aattcccaga attgagcctg
84241 tttacaaacc taaaacccct taaatgaagg ggaggctgga gcccttgagg aaaggccctg
84301 gtaccctact aaatgtttat actgttaatc tttctctcag ttttccccaa aagagatgta
84361 tggccttttt actagggtaa ctgtgcattg agaaaagaga aataatcaga cctctcaggg
84421 cttactggac attggctctg agctgacact aatttcagga gactcaaaat atcactgtgg
84481 cctgccagtc agaggaggga cttttgaagg tcatgcggtc aatgggattt cagctcaaat
84541 ccatctcaca gtgggtctaa tgggccccaa tgccatcctg tggtcatttc cccagttctg
84601 gatgcacaat taggatagac atacttagca gctcacagaa tctctacatt gggtcctgaa
84661 tcgtggagta agggctatta tggtggggaa gggcaagtgg aaagcactag aactgtgtct
84721 acctaggaan atactaaacc aaaggcanta cgacttttct gggggaactg tanaggtcat
84781 aaagacctga agatgcaggg gtggggattc caacacattt ccttcaactt tcaattggct
84841 accatttgca gaagcagggg gccttgagtg gcnatgcctg caggctcggc tctagaggat
84901 acacctttaa aagtgtttca aactttcccc caccaaaaga tctgcttttc gaaaactggg
84961 atctttggca actctgaaat ttgcccagca tgccttttct ttgggtctct gagtctcatt
85021 tcttttaatc tgagaacttg atgatttaga catctaacaa cctaggaaac agggattttt
85081 tttgggggggn gnttgttgtg tggggggggg ggggggccgc nctctcgttt ttttttttgt
```

```
85141 ggtggttnng gtgtggggtg gggggtnntg tggtgtttgg gtgtgtgggg gtgtgggcgg
85201 gcgcttcccc cnccgggggc gccgcggccg ggcccggccc cctcgcgcgg cgggcgggtt
85261 tttgggggc cggcggcggg ggggggcggg ggggggctcg ggcgggcggc gccccgcgcc
85321 ccgggggtc tcccccgcgc tgtccggccc ggcggggcc cggggggcc ggcgtgtcgt
85381 gccccgtct tcctggcgcc ctcgggggc ggggggcggg cggggcgggg ggggggggc
85441 gcgtgccggt gggcgcgcgg ggggcgccgg cggtctgggg tttttgttgg gtgggggggg
85501 tgggcctggg gggtgtgggg cgcgcgnggg gttggggcgg gggcgcgttg gtgcgggcgg
85561 ggtgggggcg ggggggggg gcgtgtgcgc ggcggggggg gggggttgcg tgcggtggcg
85621 tcggggttcg gcgggcgttg ggtcggctac ggtcggtgcg gcgggtggaa gaagaagaga
85681 ggcgcttaac ttgcatacc tgcatttgac tctagaggat ccccctcttt gagaagtgtc
85741 tgttcacacc cttcacccac tttttgatgg ggttgtttga ttttttcttg taaatttgtt
85801 taagttcttt gtagattatg gatattagcc cttcgtcaga tgagtagatt gcaaaaattt
85861 tctcccattc tgcaggttgc ctgttcactc tgatggtagt ttttttttgc tgtgcagaag
85921 aagctctcta gtttaattag atcccatttg tcaattttgg cttttgttgc cattgctttt
85981 ggtgttttag acgtgaagtc cttgcccatg cctatgtcct gaatggtatt gcctaggttt
86041 tcttctaggg tttttatggt tttaggtctg acatttaagt atttaatcca tcttgaatta
86101 atttttgtat aaggtgtaag gaagggatcc agtgtcagct ttctacatat ggctagccag
86161 ttttcccagc accatttaat aaagagggaa tcctttcctc atttcttgtt tttgtcagat
86221 ttctcaaaga tcagatggtt ttagatgtgt ggtattattt ctgagggctc tgttctgttc
86281 tattggtcta tatctctgtt ttggtaccag taccatgctg ttttggttac cgtagccttg
86341 tagtatagat tgaagtcagg tagcgtgatg ggtaccgagc tcgaattcta atcatggtca
86401 tagctgtttc ctgtgtgaaa ttgttatccg ctcccaattc acacaacata cgagccggga
86461 gcataaagtg taaagcccgg ngtgcctaat gagtgagcta ctcaccataa ttgcgtgcgc
86521 tcactgccgc tttcagtcgg aaacctgtcg tgcagctgca ttatgaatcg ccaaccccgg
86581 gagaggcgtt tggctatggc ccccaggtgg gttttttaa ccatgagacg gcaaatggtg
86641 gcctcacggc tgcctgctgc atgcctgcag gtcgactcta gaggatcccc atgtttgtag
86701 aaagcattag tgaataactt ggagtaagat gatctgggtt tcagctttta gttggttatt
86761 tcctatttgg gaagctttta gtaagtcaga tgttctctga atctcagttt cctcatctgt
86821 aacatcaatc atgatgataa ttcctaagct cacttttat gggaatgaaa ggcatatgga
86881 aaggacttgg tatagtactt gtcagagatg gttattattt ttaggtgacc acaccaaagt
86941 tgtaaaatat gttagtgttt gatacctcct tgttgggatt ataatataaa atgtctgggg
87001 ctagaattta gccagatccc actggtgaca cctcatctct ggttggaatt tcctgccctc
87061 ttctcaaagt acataccttt gtcacttcac atggataatt gttgaagtaa tttacttatt
87121 gtttgtcctg gcttcaatgt tgccttcttc atctccaatt tctttcattc attcattcat
87181 tcattctttt ttttttttcc caagacagaa tctctctctg ttgcccaggc tggagtgcag
87241 tggcatgatc tcggctcact gcaacctccg cctccggggt tcaagtgatt ctcctgcctc
87301 agcctcccta gtagctggga ccacaggtgc caccgccacg cctgttgagt ttttgtattt
87361 ttagtagaaa gccatgttgg ccaggcttgt ctcgagctcc tggccttaag tgatcctcct
87421 gcctctgtgt ccaaagtgct aggattacag gcgtgacccn cacacccggg ccctttcttt
87481 ctcttttta atataatttt ggtcatcttc ctctagacaa taggataatc ctttacaaca
87541 tttttctgta agacatttac ttttggtaaa tagtgaaact cgactctaga ggatcccctt
87601 gcatcgatgg tgcaatagag gtggtgggta aaatggtggc tgcctcagta caaatcagga
87661 caatagtggc atcaatgtac ttgcagaaaa aaaaagtcct ttaacttaat aatgtccttg
87721 tttagggagt acaagttatt aatttgatta aatattaact tgagtacact tgtttgacaa
87781 aataagaagc actcgtaagc aattctacta tatacggagg tgtgatgatt gtcttggggt
87841 aaagcagctg tgcaattgtt tgagtcgcgg gctgaaccgg acacttttttt cacggaacac
87901 catttttatg ccttgcagac aaactatggt tatgtagagc taagtatttg cagaaatttc
87961 tgcaaaataa ataaagtgaa atacacagaa acagagagta aaacagtgat taccagaagt
88021 gagggtgagg tgggggaatg ggaggtgtag gtcgaagggt acaaagttgc agttgagttc
88081 aagtatttct cgtgcttcag cctcccaagt gtctgggatt acaggtgcat gccaccacgc
88141 ccagctaatt ttggtatttt cagtagagat ggggtttttgc catcttggct aggctagtct
88201 tgaactcctg ggctcaagtg attcacccac cttggctttc caaagtgtgg aggttacagg
88261 cgtgagtcac tgcgctcgag ccatctgact aggtatattt atattcaaat atgtatacta
88321 tatatatatg tatgtataca atatgatttt attaaatggc tctcgtgggg gtcgcgtggg
88381 tgggacaacc ccccttgca cgactctttt ggggtggcga aggcgtgtgg ggttgcttgc
88441 tagtagggaa ttaggggctg gggtgacgca cagtggctgt gatctatgcc tactaaatat
88501 tttntcttgt gccgtggcta ccagccaaaa acgtccagga ggattgtgtt gctgcagcaa
88561 cgccaatccc tcccaattgc aagaaaagca acgtacaatg tgacactctt ggtatatgtg
88621 agccccactt tgatcacgag cagggtaaag caatgcttct taaatttcaa tgggcacaaa
88681 cgtgatctgg gggatcaacc gaagatgaac tttctgattt agtagaccag ggtaggggca
```

```
88741 gagattctgg atatctggca agttaccaga ttatgttggt agttggtcca tcttttgtgc
88801 agcaaggggc tagaatattt ctcaataact aaataaaaaa aaaatacact taagggcttc
88861 tccatggagg ttcactactg aacagtaaaa actcataaat ataaactaag ctcccaaaga
88921 gcctcagaaa atcaatctct aacagagggt agccagaggt ggacactggt taatatctgg
88981 caactctgac caccttgaat ccccgtgtct attttcaggt aaaaattgga gtcacctaat
89041 ggctagatgt tatcagggcc atacatgtca gagcttcctc aggattctgc cccattctag
89101 ttctacacac acaggaaaga ttacagaaca tatctgaagt atttctccag tatgtataac
89161 tggagataat ccggagagcc cattcttgta ggttgttgtg gagggtaaac ccggggtgaa
89221 cagggccgtg gtggtgctag ttgggttccg gaattgggtt tcctctgggg ttcttgggtc
89281 tcgctggact tccagaaatg aagtcggggg accctcatgg tggagtgttt atagggtcta
89341 ataggaggtg tgtccagagg ttggttccct tccgatagtg cagaccgggg gacagaggtt
89401 cttccctgtt gggggctttt ttgcctgcag gtcgactcta gaggatccct ctggtctgtt
89461 ttagtcttca acatgccttc ctcattgagc ttaatcattt ctagcttttg atttaaagtg
89521 agagatttgt gactcttcct ttcacttgaa tactcaaaga ccattgtagg gttattagtt
89581 ggcctaattt caatattgtt gtgtctcaag gaataaggag gcctgaggag agggagagag
89641 atgggggact ggttggtcag tggagcagtc agagaacaca tttatccatt taagtccacc
89701 atcttctgtg gatgcggtcc atgggaccaa aacaattaca atagtaacat caaagatcac
89761 tgatgacagg tgaccataac agatatgata ataatatata ttatataagc tgtaagatat
89821 tcacatctat ttccttatac ttatttccta attatgaaat taatactacc tttttcaaaa
89881 aattcaagca atacataaat gaatacagca tagaaagtgt tacactcctt taactagcaa
89941 agagctatgt tcttcagcat ctcttaaccc cagcctattc ccagcttctc agccaccaag
90001 atgtattcat gacaattcac cctccatgcc agggttgggg aatcaccttc aaagagaaac
90061 aggaggtctg ggcaagaata ctagccagta cttctaattt aaaaaaagag ctatcactct
90121 gggttattaa gcagtttcca tgtaacaggc actgtgctat gctctttctt cctattatct
90181 cacttaatcc gtgggcacag aactttgaga caaattcctn ttttagtgca tccgagggtt
90241 acattacttg gccagggacc cccagggcaa gggacaaggc tgtcttggta tctcaggctt
90301 ctgggcccca agcctcccac actgctctgc attccaagaa atacttttca gcatgcctag
90361 aggtcggctc tagaggatcc cctgctcatt ccccagctgc caggattgtt actggctgat
90421 gacccacatt gagtcctccc taagaattgc ccttggcaaa gggagctgtg tccccttcct
90481 ggggacactc tgcatccaat gactggctga tttggggccc gcccgctttg tctcaattca
90541 ggacatccct gaagcacttc cccagcttca gggctcccct gggaatcagt ggagacctct
90601 gttgcaactg aatcacagtt caagtcttct ctgtgcccaa tctggcttcc ttcacaccct
90661 gtggctgctg tgcctgagag cacccaccgc cataaccctc cttgcacaca aatctccagc
90721 tcagagtttt gttcccaggg aagtcatcct atgacacctg ctatcatgaa gcttatatac
90781 taggagtgat agaaaataaa cacaaatagt aacacagtta tgtgaaaaat tacattgctg
90841 tgggaagaaa tagagtgggg tcagggatc aggaatacag attgggaaga tgattaattt
90901 ttcatattca atagaatgat tggactggca tctctgagaa tgtgacactt gagcacagac
90961 ttggcaatta gcagactgaa tgtccagaag cttctgcact ccaaaatttg agcctggatt
91021 cgtcaggatt tcccagagaa aacagcaaca attaggatgt gagtggtgtg tatgtgtgtg
91081 gtgggtgtac agatatgtgg agttggtaca tgcatgcaaa ctcagatctg ttttcaagga
91141 attgggtgaa tgggcttggt ggagccctgg caagtcctga gagctttcac ggaatggccc
91201 gccaactgga ataaggttgt gaattggttg ctttaagtct taagggcagg attttcttgc
91261 ttgccctgag gatacctcac attttttgtcc ctgaaatctt gcatgcctgc aggtcgactc
91321 tagaggatcc ccttgtgagt ttgttttttgt tgtatttatt tgtttttgtt catgagtaat
91381 ccataacatt gccttcatgt attctgaaaa tgattgggaa ctgagtccta gtcgttttct
91441 ctttacctgt catgagtggg gagagttggg gaagcctgac tcataagaag acttgccaag
91501 aagaaagtcg agttaatgtg taataatttt gctacgggca gattgataaa acaacaacaa
91561 caacaataag atctcaatat cctaactgta gacattctag gtgaccttca aaggagtcta
91621 gtgggcgatt taagactagt tgcttatttg ctaacatatg tctaaggaat atgttctatg
91681 gtggtttctt cttggcagga actccaatct ccttccttct cttgaacact gggatgtgtt
91741 tgcattgctt gtcttgtgat ggtgaccata taaagcagag gccagtgctt tagcctctgt
91801 gttgcagccg cttatccctc ctaaaaagct gggaggtttt gtgatgtgag aagatgatcc
91861 tggctcatcg gttggagcca gacatgttag actagaatgg agacaaaagg aacatctaga
91921 gtctattcca tgtgaatgtt tgagggttga gggtctgggg ctaactagag aaagaaacgt
91981 gcctaatatc cctggcttag aatctggact gccttcatgg ttagcccttt ggaccaagct
92041 tttagttggc ctggactcag aggctgccaa gccaaaaagc tggggctgcc tcttctggag
92101 agagagcaga aagatagaat agtgggaggg gggaaggta acttgtttaa taatacagag
92161 cactctgttc ttcttaataa agtctgtcct ccggagaaac tagttaacaa gagctaatcc
92221 tgcctgcagg gtggaatact agaagtctcc acctgaagtc aaaagtgtag cttgtggtaa
92281 agcatatgag atcaaccacc tcctatgttt tcacagttct gctctgcctg gagggaagta
```

```
92341 ccagctccaa aggaggtcca gctggtctcc tgtgagcagg atttgcaggc tgagggttaa
92401 aggcgctcta agccatggag cacctctgac ccccactggc tgctgtcatg cattgcacct
92461 cagggatggc caaggccctc agtacattgc cctttcctaa acacaagtga ccagtttctc
92521 ctttgctgta ttgtcaggac tttccaccaa gtgccatcta tttctcatcc atctcctttg
92581 aaatattttc actctttatc tacttctcct ctgggctggt agatatttct aagtcattgt
92641 atagtgcatg gattttattt tcattttcgt ttgatcagaa aagtgagtcg agaagatatg
92701 acattgttgc atatgtggtt gattttcatt tctctttttc tcatcctttt ggtgacaaac
92761 accaggagct gcttcttttt gtataagaag tccttcagca cctatactgg tcatcatctg
92821 aagcgcatgc tctcttgcgg tacctttgat agagcgagag caccacccac aggaacaaaa
92881 catgccctga gtctctggag agaggctgga cagttaaatg agaccagggg ccatggacca
92941 caaagcccgt ccgtaatcag agtgctgcat caatggcgca cactcaagtg gtcgattcca
93001 tcgggtaagt ttggtatctg gtatggctct gtcaatttgt atgatagctt gggaagctga
93061 actcatgaat tagaccagac caaagccacc tggggggaaa cgcggggtta tttgttgggg
93121 aaggaacatg ccctcccagc tttgtggtga gaaccgagac atcgactcta gaggatcccc
93181 ctgtctcaaa aaattaaata aaatgtatat tacagtcaga caggctactc tgtgaattct
93241 gaatgggcca ctgtctctaa tcagaaagct ttgtagatat tcttggcaca tggcaatggc
93301 atcctcaatc agtgtctatg tggctttact aaaaattaac caaagatcgg ttttatttct
93361 taatactaga caagactgat caagcaataa gaacttgtgg tgtacttgcc atgttcaggg
93421 agtatataag gcaatgaatg caagggttgc agcaaagaaa catgggacac agtcctgtaa
93481 tataagaagc tatctaccta ggaagatgag gcccaatccg atacaagcaa taaagaagta
93541 tcaagtaatc tctttactga taatactgat caggatagta atagtggcag tgtattgagt
93601 gtttactctg ttccaacgac tgtgctaaat gctttatata aatcatgttg ttgaatcctc
93661 aaaacaactt tattaagtag gtactataat tattgccact ttaggggtaa ggaaacgaac
93721 ccacataaag tttatatcat ttgccaggat tttattccag gctgtccgac accaaagacc
93781 atgcctttaa atatccagca atctgtaaat gcctcataag agtcaaaggg aggttcaaag
93841 tgggggagga tcagcatggg gatgggatga agaccttcac gggaggaggg aatcctggga
93901 agatgtatga tgttggtttg ggggtataaa aagagggatg ggaggaagat ctttcccatg
93961 gaaatggagg ggtgtaaggg agatggtgag tggcactcac cagggctgta ggaagttgtg
94021 ataatggcgc aaaaggcttc attgtggggt cccaatgaga ttatccctgg ccggcaacat
94081 gcaccacccc ttttttggct tggaatggtt aagttggagg ggttatatgg gtggttctgt
94141 gagacagana ggcccccagc ctgnntttac ccataaggcg agtatattgc agagccagac
94201 gcgaacgatg accatccgca atagaggacg agttatgcta cacgtatcag agtaaggtat
94261 tcgtgcacta atagatgtct cttgatctca gtagtatata gcgtgcgagc angatgctgt
94321 gatcactcga tcactgtgcg gctgtcgctg acgtatcaca tcgcaacatc ctactaaagg
94381 tctgtactga tccatactac tatctgaaga cgatataagt atgtctgcga gtggatgtgg
94441 tacgagcgta ggatcatgta tgtacgtact ggctncaact cttctgcatg cgatatcgag
94501 tgaatataga gtaatgatgc gattaatatc gatagtngcg tctacgatgt tatcgtagac
94561 gttatcatga tatgtacact acactcgaag agtacagctc actacatgaa cttgatctac
94621 atgagactag atgcgcgtct gaagatgaga acatctaata ctaactgtcg agtgtactca
94681 tatgatagac tactaccttg aacagatgat gcgatgatgt atatagagac cgctagtgtc
94741 gaagactgtg tcggagtccg agagagatcg acacatacag gtgatgactt cgatacgaga
94801 agtgtatcac tttcagatga cgatagatgc tacgtcagaa tgagactgat cacgnactat
94861 gatgatgctg ccgacgttga cgtgattgct catgagagaa ngtgagctat cttatatata
94921 ttgctgtgcg tcaatacaan gtgtcgctcc cctaatgata tgctatgctc gtatatagag
94981 tgtagtcaga tcatcatatg tcgttcatgc gcgacgagta tggtatatca gaactgcgta
95041 tcgttaactc tacactgctc tctctgtaga tgtgtctata ctgagcagta gtattcatac
95101 gtaatgactg tactcacaca cgatctcata ctacatgtcg ttctctcana catgattctg
95161 tacacatcat cgtactcatc ctatagacgt accgtcatgt gatcagtctg tatgacacat
95221 cggagccgtg tcttgcataa tatgtcgtgc atcatatata gtagtgctac accaatgctg
95281 aatgctgcta gtagcggctc tcacagtgca ggtcgtgaca tatttgagat gatcatacac
95341 tgatatatca tactatacga gcatatgtga gatcatgcac tgacatgact catcactatg
95401 cagacacatc gctggatcat agtatgctga tggtacgcta gtatgactcg tatcacagag
95461 atgcatactt gtcgatagac attcctgctc atatgggagt ctcgcgatca gaaggagaga
95521 gtgtccgatg aagcatcctc tgctgagtat gtgaggagct ctgtgtataa tagatgatat
95581 catggatcag gtcggtgctc ttacataatg atagtagctc tgatcgtcat gatgtgcttc
95641 tgttcgacac tgagatctca ccgcgcacag atgctagctc gtcgcaagag ctataggtcg
95701 tgctcgtaga tggagtactc tgctgcgtag aaagaggctg tgtgatgaaa tgacagaacg
95761 tctgctcgca tcatgaatgg catctgtcac gacatgagat agtataatgc agtagatcga
95821 cgatcgtctg tagtgataat gtgatgtatg atgcacattc gcacgatcgg tgtcagcatc
95881 gatgagatca tcgtcgtcag aaaacgatgt gcctatcaca atgacgaata ggattgtcgt
```

```
95941 cgatgtatca gtcatcgaag tgctgatcga catatcgatg atgtcttgac tgagaatgat
96001 cgtgtcgata gatgaaggat gtagtacgtc attgtgtcag ctgtgttcgg agtaaacact
96061 aggtagcgcg tactaaagtg gaatcgtcta tcggctgtag tagtgatgtt aggtagctgt
96121 atgatgatga tagtgccgtc ntggctgatg catcgagttg aatcagctag tagtagatgc
96181 atcatcttag tagatgagca gcagccaatc agcagagagt atcatcacgt tatgagaaga
96241 agatgcatta cgaatcatcg atatcaatcg gttgatcctc ccatcgacgt agtggtacga
96301 tatcgtcact aattccgcta gttaatgtcg accgtcgtct gttagctgct catggtaagc
96361 cttaatgcaa gcatcnatga tagttcgtag tcgatctggc tgcatggaaa ggaatggttg
96421 gtcaatcttg ctgatccaag tagtcatgga tcctgtacta gtagtctatc attatgcctg
96481 caggtcgact ctagaggatc cccagaccca tgttcacagc agcattattc acaatagcca
96541 aaagatggga acaacgcaag tgtccactga caggtaatga ataaacaaaa tgtgatgcat
96601 acatacaatt aaatattatt aaatcttaaa aagggagata attctgacac attctacaac
96661 atggatgaac cttgaggaca ttatgctaag tgaaataagc cagtcacgaa aggacaacgg
96721 ttattgattc cacatacatg aggtgccttt agtagtcaaa ttcatagaca gaaagcagaa
96781 tggtggtttc cagggactgg ggatgggaaa gaatgggaag ttacagttta atgagtacag
96841 agatttggaa gatgaaaaga tgagttttag tgatggttac acaacagtgt gaatggacat
96901 aatgcaattg aactgtaagt acacttaaat ggttaaaatt tcaaatttta tgtatctttt
96961 accacatttt tttttttttt ttttgagaca gagtctcgct ctgttgccca ggctggagtg
97021 cagtggcgcg atgttggctc actgcaagct ccgcctcccg gattcacacc attctcctgc
97081 ctcagcctcc tgcacaattt ttttaattaa aaaaactctt taactatctg aaggctacta
97141 tcatgacccc tggaataatc ttcagagtag acacatttat ctccttcaac cattcttcac
97201 gtgacatgat taaaggtcat tcatacctcc agtcactcac ctctggatgt gctgcagcca
97261 ctatacccct gtttatttga agacatagaa ctcaatatga cactggacag ttaagaatgg
97321 aaaagggcta tcactggcct caatatggct actaggattg ggtattcagg caggacttcc
97381 tactaaatta ttacaacgct ggttattttt catgcctgaa ggtcgagtct agaggatccc
97441 cctggattac agatgtgagc cactgcaccc aggctgtttt caaggttttt taaaattttt
97501 tatttatttta ttattattat actttaagtt ttagggtaca tgtgcacaat gtgcaggtta
97561 gttacatatg tatacatgtg ccatgctggt gcgctgcacc aagtaactcg tcatctagca
97621 ttaggtatat ctcccaatgc tatccctccc ccctccccc accccacaac agtcccagca
97681 gtgtgatgtt cccttcctg tgtccatgtg ttctcattgt tcaattccca cctatgagtg
97741 agaatatgcg gtgtttggtt ttttgttctt gcgatagttt actgagaatg atgatttcca
97801 atttcatcca tgtccctaca aaggacatga actcatcatt tttaatggct acatagtatt
97861 ccatgatgta taaaaaacga tggttagatg ccacgaagta ggtggcaatg gcttaaccgt
97921 atgcgtgttg tcaggcccga gggccagttc gcatccttgt caaggggagt gctaaccttc
97981 tctcctttca tacaacacgt tttcagggtt ttatagggga aatggaaacc cataggtgca
98041 ggacaatagt gacctgctgg ctctagtcac ctgacataaa atattcatta tcataataat
98101 gatcatagct gccatacaat ggttattcta tttaatctgt ccaatacagg acagagatta
98161 cagtttccct ttaaaaggtg ggaggtctaa agctcagata ggttacggag cttgtttgca
98221 gccatacaaa tgatcaatgg gtggactagg attgggagct gtctctcttc aacttaaaag
98281 cacaatggct tttaccttcc tcccaatgcg tccttgaggg agtgttgcct gggtaaattc
98341 atgcctggcg aggtcgaggc tagaggatcc ccctggtccg tgtttgttac ggcttgagct
98401 gagctttcgc tcactgtcca ccactgctgt ttgctgctgt cgcagaccgc cgctgacttc
98461 tatccctctg gatccagcag ggtgaccgct gtgctcctga tccagcgagg cacccattgc
98521 tgctcccaat cgggctaaag gcttgccatt gttcctgcac ggctaactgc ctgggttcat
98581 cctaatcgag ctgaacgcta gtcactgggt tctaggttct cttccgtgac ccacggcttc
98641 taatagagct ataacactca ctgcatggcc caagattcca tttcttggaa tacgtgaggc
98701 caagaacccc aggtcagata acacgaggct ggctaccatc ttggaagccc cccgccacca
98761 tcttcggagc tctaagaaca aggaccccg gtaacaatat cttggtccac aaaatatcca
98821 gttgaactga ttgaagggtg gttaagtatg tagtttttgc actcaacttc ccctctccct
98881 gttgataagg taaacctgat tattctctag ggactactgc ctctcctctt ctagcccaca
98941 ggctgattca gtggaattgg ctatatccct ggtcagggc agaacatgtg ggtttagaac
99001 taagccactc agcactagca ttgatctggg ccatgagat gggttcaggg gtgtgatcca
99061 attagagccc agaaaaagca atgatacgtt tgatatgtgg actggggttg tcggaaacaa
99121 taaggtcgct ttattctacc aacgtggacg tgggaagcaa ctgggtgaca gcgtattgct
99181 aacagcacaa aagtaggaga tgagatgctt agcctgggca cgaaaggccg catagcactg
99241 gtaaccggaa cagaggaaaa gggatatgaa taggatgatc ccctagcgca cccggatatg
99301 gaaattcgag gacggggttg agacacaaaa aaccccttcaa aaaatcagtg aatccaggag
99361 ccgctttttt gaaaagatca acaaaattga tagaccacta gtaagactaa taaagaagag
99421 agaagaatca aacagatgca ataaaaaatg ataaaggggga tatcaccact gatcccacag
99481 agatacaaac taccatcaga gaatacaata aagcacctct acgcaaataa actagaaaat
```

```
 99541 ctagaagaaa tggataaatt cctggacaca tacaccctcc caagactaaa ccaggaagaa
 99601 gttgaatcct tgaataggac aataataggc tctgaaattg gggcaataaa ttaacagcct
 99661 accaaccaaa agaagtccag gaccagacag attcacagcc gaattctacc agagctacaa
 99721 aaaggagctg gtaccattcc ttctgagacc atgtcgatca gcagaaagag aggagatcct
 99781 ccctaactca ttttatgagg cgcgcatcaa cctgattacc aaagcctggc agagacgcga
 99841 cacaagaggg gattttgggc cgatgtcctt gatgaatatt gatgcaaaaa tcctcattgg
 99901 agttctgggt aaccgagccc ggcagcacat caagaagcgt gttccaccat ggattcagtt
 99961 tggcttctac ctgggttgcg tggctgagtt cagcatggcg caagtcgata gatgtagtcc
100021 ctcctttgtg gcagaagcga agacgaggac cacgtggatt gtctcagttg gtgggcggaa
100081 cgggctgttg acagaattgc agcgggcttt cgtgtttaaa tgactcccga tcatgtgagg
100141 tttgtgatgg ggagagtcgc aaaagagttg gtagttgtgt tttgttaatc cccagccagt
100201 tgatttactg gagtgtggca catgtttaaa ggctgttgaa atgtctcatt ccagggatgc
100261 acgcccttga tgcctgcggt ttctggacgt caagcggaca cagtgaagct gctgttgaag
100321 atgggagcca atattaacat gcagagatgc ttatggccgc acaagtttat gcctggccac
100381 ctacctggta ctgacttgtg cctgtcacag ggtggaagag agcagggtag gcgaagggtg
100441 tcattatggg gtcccagttg caaaggagca ttcttggatc tatgcagctg gctaaaggag
100501 ctggaacttg aagctgttac tccaatcatc ttcaacgttt atatccccac ttagagttgg
100561 tttcatgaat ttgggccatt ttggatcttc ctaacaatcc tctaagatag aggtgatatg
100621 gccacttaga ggaacattct tttctatctt aatggcatca gaatttctct tgggatattt
100681 ctggacacac ttggtgcttc taaaaacaat ctcgctaaat aaccccaaca gggtgggagt
100741 actgtgaaga tccattaaca tctgtggggt acgattggtt gagtagccgc ttgaggctca
100801 gggactgtgg agaaaaacca gaactgggga agggtggtag ggagggactc gaagatacag
100861 aacaggggga gacaaaagcc ggctcttaaa aggacaacga ccaagccggt gagtcagccc
100921 gcagtcaagg cgcaagtgta cacactgtgt cataatgcta gttctccacc gtggagattt
100981 gcattcagca ctttccaaca gtgagagcag gctgggttaa gcctactgaa atcctcaagc
101041 ccgctcctgt cagactcctc cgggaaccct tgcctgcagg tcgactctag aggttcccct
101101 taaatcttta atccattttg atttgacttt tgtatatggt gagagatagg ggtctagttt
101161 tattcttctg catatagata tccagtcttc cagcaccttt tattgacgag actgtccttt
101221 cccaaatgta tgtcttggtg cctttgttaa aaatgagttg actgtaaatg tgtgaacttg
101281 tttctggaat ctcaattctg ttccattggt ctacgtggct gttttttatgc cagtatcatg
101341 ctattttggt tactatagcc ttgtagtata atttgaagtc aagtaatgtg atgcctccag
101401 cttaagtcaa tttacataga ttttgtgtat tcgtttggat tttctttta atcactgaaa
101461 aagttctgac tgataaaacg ttttaaaaaa gaacttggag ttttagctgg aaaattagct
101521 ctatagaaat aaacagcgtt gtaataaatt agtaggaagt ctggctgaat taccaaatct
101581 agtagccata ttgagggcag tgataggcct tttccattct taactggtca gtgtcatatt
101641 gaggtctatg gtctcaatta aacaggggta tagtggctgg agaacattca gaggtgagtg
101701 actggaggta tgaatggact ttaatcatgt cacgtgaaga atggttgaag gagataaatg
101761 tgtctactct gaagactatt ccaggggtca tgatagtagc cttcagatag ttaaagagtt
101821 ttgttgactt aaacaattgg tgcaggaggc tgaggcaagg agaatggtgt gaatccgggt
101881 agggggcgttg cagtgagtcc acctcgcgcc actgcactcc gagctgggca acagagcgag
101941 gctctgtctc gaaaaaataa ataaagatgt gggtaaagtt cctacaattt tggtcgactc
102001 tagaggatcc ccagtggatt tgtcatttaa gaactactca cccacactgg agggtctaga
102061 agacatactt ttagcagtac cgtgagatat aggaataaat ctgtgagggg aacccagcat
102121 ctttgaagag ttctgtgatt gctcttctct gcagacagtg agaactgcag tcattgaatt
102181 gggaaaccta aatgcagcgg gaataattgg atcctaggat ggtagggcta agtggtggta
102241 ctcaactgcc aaagacaagg tgggcatagt tactgttgtg gaaaaaaat agaatcatgg
102301 caccccaaat tcactctgcc acagggaaat ttaagcttga gaactgagtc atgcaaaaag
102361 ctgtcttctt tcgttcccaa acagatagct gtattttcac atgctgactt tatcatatgt
102421 agagttactg ggcatgagag aaatgtgtaa ttgctttttc ccctattccc tcttttttt
102481 ttgttttttt ttttttgag acggagtctt gctctgttgc ccaggctgga gtgcagtggt
102541 gtgatctcgg ctcactgcaa tctctgcttc gcaggttcaa gcaattctcc tgcctcagcc
102601 tcgcgagtaa ctggggatac aggcccccac caccacaccc ggcgatttt ttgtatttta
102661 ggtagagaaa gggtttcacc gtattgggcc aggctggtct caaactcctg gactcagggt
102721 gatttggcca cctcaggccg cccaaagtgg tagggatat aggggattag caccaacgcc
102781 cgggccaatt cgatgtgcct cttttctaca tggtgaagta tgttggactt cactggagtg
102841 tctaatcaag atgcctccca aagaaaggtg ggccgcttgg tgttcatgtg gctaatcccc
102901 ctcttcttta tatattgcga gcacgtttgt gggttgacgc ggggccgtct ttaaaataca
102961 tgcctgcagg tcgactctag aggatcccct tgatcctaag caagtaagaa agtagaagaa
103021 cataagctac attaggaaaa aagtgaatta accatttttt aaaaaaagaa caaatttcag
103081 aaaggcaggc tgagggaaag ttcatctact tcaaaacact cctagaacca gctttgaaca
```

```
103141 gaatagttcc cattttgcaa taccacccac ttagcaaaga aaatccaatt ctctaggcct
103201 catggtggaa agtaaaacta aggggaaaaa agaaagtaca aagataagga gagttcaaaa
103261 ggaagtaaaa tatccagaag agtcctttcc aatccagtac tcaactcaga ggcctcatgt
103321 actgatcaaa tcctagcctc cattttttc cacgttttct gcagcaaaac atgaaattct
103381 gccttcatgc tgaagctata agcttctgtt aatagttgaa tttttcaggg ccaggcacag
103441 tggctcacat ctataatccc agcactttgg gaggctgagg caggtagatc acaaggtcag
103501 gagttcaaga ccaacctggc caacatggtg aaaccctgtc tctactgaaa atacaaaaat
103561 tagccgggcg tggtggcgca cgctgtaatc ctagctactc cggaggctga ggcaggagaa
103621 ttgcttgaac ctgagaggca gaagttgcag tgagctgaga ttgtgccact gcactccagc
103681 ctggatgaca gagcgagact ccgtctcaga aaaaattta aaaagacga aaataaatag
103741 ttttaatttt tcaaagtttg cacagggttt atgtggcttt aagcaattac cataattggt
103801 gatttccttg tccttcatct gcttttaag tggaaggttt tcctattgaa aggtttggtg
103861 aaagggaaga aaagtgaagt ggtatttaaa gagggtgaag tttcaggcga gaggtggagt
103921 ctagaggatc ccctgtagtg caactactct gagaactgag gcaggaggat gaatcgcttc
103981 aacccaggaa gtccaggttg cagtgaactg tgattgtgcc actgcactcc agcctgggtg
104041 acagagtgag agcttgtctc aaaaaaaaaa aaaaaatgac caaaaattga ccaacaagag
104101 atgatggttg atgttctaac cccctacccc accccactt tccccaaaag agcaggaaaa
104161 tggtatcact ttctagaacc taaaggggca aggaaggggc tgttactgga aacttctgag
104221 agctgcagtg gtaacgtcgc tgtgggagag gggccacctg gcaagaactg aggcctttgg
104281 tagagaaata caattatggc gagaaaggga gctgggttct ctccctcctc ctgccagttc
104341 ccccatcggg aaaacccaag taggaagcga agggcaaggg agcctggttg atgcggtccc
104401 ttgaagtcag cctcagagca gggctgtata aaaaagagaa tgggcttgaa ggccaaattg
104461 agaactatct aggaccacgg ttcatcccac gacctgggga gggcgcgcag gagtatgaaa
104521 agagggtgat ggttctgcct agcacccaag tctattctgg ttgggaggcc cagaagagtg
104581 ctgtgatggc tacagagtga tctgctgtgt ggcttcgggg agtagacgaa ggaaaataca
104641 gcacgtgtgc tacagaatgg taccgagtag ggcatggaca tgtagcttcc gactccacag
104701 aggctgtcag ataagaattg tggccctaga gtgggtgaag cgattaggca agatgttatg
104761 agggctgtgg agaggaggag taaggtgaaa gagataggaa agggttatgt caagatagtg
104821 aagaggagag agcttgggtg gagtgtgacg gaagcgggtc atagagtgtg tgtattgtct
104881 gatgggtgaa gatgaatagg tacttcctcc caggtcggag gccacgaaga tccccgttca
104941 tcttcggttg atcccccaga tcacgtttgt gcccattgga atttaagaag catggcttta
105001 ccctagctcg tggatcaaag tggggctcac atataccaag gagtgtcaca ttgtaagttg
105061 catttcttgc aattgggagg gattggcgtt gctgcagcaa cacaatcctc ctggacgttt
105121 ttggctggta ggggtacagt ctggtcacaa aacagaacaa ctctacagag tgagactttt
105181 gccccattag caaccatttt aagcaaacag ccacagactt ctcttccatt aaccttcttg
105241 gtaacctcac attttgtttt cctaactcta caagaaactt tggagaggca agttcagtta
105301 gattccttgc aaagacttcc tcgcagaaaa attaatgcaa agaataatgt tattctaaac
105361 cctccagagt ctgccaggaa ggagcagagg ggaggagtga gattgctgga gccagatctc
105421 tatgatgtgc taacttaatt cagaccacag gagctgcatc taaacttggc caatagttca
105481 cgagtgaaga atagacggaa aggatatgtg gtccaactta gaagttttca agaacaattt
105541 tgagatgctc cagcgattca ccattcacgc agacatttaa aagcatcgtg gggttgtgtg
105601 tatatccgat tttggtgtct gtaatggtgc caatcgattg ggattgcgtt ggaagagggc
105661 acaatcccag atgtgattgg ataagaattc cgtaggtgtt cagtgtgtga ttgggaatct
105721 gggggatagc aacgaagtgc cggttcggag gagagagaac gggttcggaa cgagtcgaag
105781 ttgaggatta ttaagaggca caggtgagac gttaatcgag atgctgtggg atgcgcagtt
105841 ggtataggca atgccgtgag tagccagtgc ccgtttactt gttcttttgt gagtgctttt
105901 ctggcttatt tttctgtttc gcgaaggctt gtagtcgctc ctcctgacag aagtgcagtc
105961 gtaaaagtca gagctgtggc ttgtttaca attttttga tgtgcatgtt catgtctcct
106021 tctgtatgta ctgttttttg cgatctgccg tttcgatcct cccgaattga ctagtgggta
106081 ggcctggcgg cgcctggctg cagacattta ggtgacacta tagaaggatc cgcggaattc
106141 tagactccta ataccaccat gagagagagc cccagggcac ttccgacgct caagtttccc
106201 tgataaagaa tatgtctgtg tgaattgatg ctattgcagc atcttgtgta agccatctcc
106261 gcctcctgtt acagcttgtg ctttaggcct ctgggtctca aaatggggtc cactgaaccc
106321 ttggataggg atccccgact tttttaagggg tttatggcat taaactctat tcataataac
106381 atcacaacgt tatttgtctt tttcactgtg gctgccttgc atcgattggt gcatagaggt
106441 ggtgggtaga atggtgggct gcctcaggta cgattcaggt caattattgg tcatgcaatt
106501 gttgcttgca ggagagaaag gagtcctttg gagcctaatt aatgtccttg ttttagggaa
106561 gtaccaagtt agtttagagt gtgattagaa gatttagact tggagtgaca cctttgtttg
106621 gaccatatta ggagagccac tcgtgtacgc agtgttctaa ctatatgagc gggaggtggg
106681 gagtgagttg tccttggtgg gtgaatgcag ctcgtgtgta tctggtttgt tgttcgcggg
```

```
106741 tgtggaaacc ggggtgtttt gttgttgagt gggatcatcg tatgttttat tgtctttggg
106801 tggcctaatc gaatgtgtgt atggtgatga gctgagtggt atgtgccaga gatgtgctgg
106861 tctgctgtca tgacgaatcg cctgcaggta gaatctagag gatcccact gtgcctagcc
106921 atgaaggact ttttaaacat aacatcatga aagaaagaaa aaatgaataa ggaattaaat
106981 gtgattttt tttaagtttt atagaaaaat cacttaaaaa ttgaaagtca gccaggcatg
107041 gtggctcacg cctataatcc cagcactctg ggaggccaag gcgggtggat catgagttca
107101 ggagttcaga accagcctgg ccaacatagt gaaaccccgt ctctactaaa aatacaaaaa
107161 ttagccgggt gtggtaacat gtgcctgtca tctcagctac tcaggaggct gaggtgggag
107221 aatcgcttga acctgggagg cgaaggttgc agtgagccaa gaccacacca ttgcactcca
107281 gcctggatga cagagtgaga ctctgtctca aaaataaaa taaaaataaa aataaattaa
107341 aagtcaagta acaaattaca gaaaatgttt tcataaacat aacctataaa agaccaatgc
107401 ctttaatata aagagcacat acaattagta agaagaacac ttatactta atagaaaaat
107461 gacacaaggg cttagtcatt tcaatgaaga aactcaaatg ggcaacaaac ttgtatttca
107521 aaagttcaaa ccttactata aattacataa acacaggaaa tgacagtgga agctattttg
107581 gccaaccaca aatggaacaa agatttgtta aagttagtgg accatactgc agtgatacca
107641 gaaaggaggg aagaacctaa gctagtagga gagaacaaat tagactcatt cctaacggca
107701 agccagtttt agcactaatg tataaaaaga acctcaaaag ctgattccat acccgtttga
107761 accactaact tcctcttcta aggaaattgt ttggaaaggg ccgagggtgg tggataggaa
107821 gggtatactt ttgatgacgc aggttttttt attttttta ttatcccatg attgagcaat
107881 gcttggctct ttcaccttgc caaggaaacc acttgagtgt aatttcagag ttttgggagt
107941 ttcattgctc catccgtttt gatctccatc acaagaagca ggactccaag ctgtacaggt
108001 taaggatgga tcccaagatg agttattgtc tctccaaagt ttgtactata atgaatatgc
108061 caaaattagc atggggagga acacaatgta cgtatatagg taatataaaa tgagcctgtg
108121 acccagttac agctttcata cattttcta aataatcgta tctggtagat taattggaat
108181 atggcagctc ccgtagcaag tagggggta atttccctct ggtgcatgtg tgctgaaaag
108241 catgggttta ctattctgaa cgtaagggac attaacaatc agcctagtca gtccaacacc
108301 aatagatctt tcattcttct ttaactgttc ttttcgattc ctctacatgt ctctgtttcc
108361 gcccctgact cctcgtcaat ggcttctggt taaaagaaag aagtgtcttt tctgttgtga
108421 gaatgctatg gctgctagtg agtgtgcctc ctttggacac aaaaagcttc cccagatgag
108481 gtggatttgt cagcctagta gttccgctaa gtacatggtg cgtttgggag cttgaattgg
108541 ctcaagttcc gaatcccagt tttattaaag gtgtgtgcca tgtgcagatt aagtgctgta
108601 tggtcctgtc atctgtgtaa gatggtgaat atgcgtaggt ggtcttgcgt tattaagagt
108661 ttgtggtagt ggtggtgaag gtggtactta tagaagtggt acggtgtttt tagtggcaag
108721 gtcgttgaca gtggttaatg tcttgatgtg agctttgagc ctttatggat ggtcgcatcc
108781 gggttggtgc gtagtggtga tgtgatgggt gtgcataagc atgcctgctg gtcgactcta
108841 gaggatcccc atgcatttgc tgcttcttct gccatgattg taagttgtcc tgaggcctcc
108901 ccgacactgc agacctgtga gtcaattaat cctctttcct ttataaatta cccagtcttg
108961 ggtagttttt ttgtagcagc atgagaatgg actaatacag gtaggtagaa atctttaatt
109021 ttatgaagga ttatgctagc cttgctggct tttggaaatt gaaaagtaag ttaagtgttg
109081 ttatgaaacc atccttcctc caatcttcct tactttcttc tgaatcaaat acatgactcc
109141 acctacctct cactttccag gaatggcagg tgttggagtc aggcatttgc cattttaact
109201 gccaactctg gaaaatgagg aattggtttg tttagtctgg agcagagctg aatgttcatg
109261 ttcagttgaa catgatagct gttttcaatt ttgacaaagc tggaagagag tttagacttg
109321 ttttcttttc tttgcttctt ttttcttctg agacagagtc tcactctgtt gcccaggata
109381 gagtgcagtg gcatgatctt ggctcactgc aagctccgct tcctgggtcc gaaccattct
109441 cctgcctcag cctcctgagt agttgggatg tacaggttgc tgccaccatg cccagctata
109501 tctttgtatt tttgagtaga gatgtgggtt tcaccataat gggtcaagct ggttcttgaa
109561 cttctggaac tcaagttgat gccacctggc ctcaggcctc ccttaagtgg ctcaggatta
109621 tagggttgtg aagcactggc cccttgggct agaactccgt tttcctttca attcctaagg
109681 gggtagtagc tagctttccg gttggggag aatgtaggga tttaataaga ccttgtggaa
109741 gtggcgaaag gccgtttcgg attactgagg ggcctttagc tcgactctag aggatccccc
109801 atacaaatag acagacgcca tacagatacc aaactgaacc gatggaatca gacacttgag
109861 tgtgcgcaat tgatgcagca ctctgattac ggactgggct ttgtggtcca ttggccctgg
109921 gtttcattaa ctgtccaggc tccctccaga gactcagggc atgttttgtt gctgtgggtg
109981 gtgctcttgc tctatcaaag ggaccgcaag agagcatgcg cttcagatga tgaccagtat
110041 aggtgctgaa ggacttctta tacaaaaaga agcagctcct ggtgtttgtc accaaaagga
110101 tgagaaaaag agaaatgaaa atcaaccaca tatgcaacaa tgtcatatct tctcgactca
110161 ttttctgatc aaacgaaaat gaaaataaaa tccatgcact atacaatgac ttagaaatat
110221 ctaccagccc agaggagaag tagataaaga gtgataatat ttcaaaggag atggatgaga
110281 aatagatggc acttggtgga aagtcctgac aatacagcaa aggagaaact ggtcacttgt
```

```
110341 gtttaggaaa gggcaatgta ctgaggggcc ttggcatccc tgaggtgcaa tgcatgacag
110401 cagccagtgg gggtcagagg tgctccatgg cttagagcgc ctttaaccct cagcctgcat
110461 atgctgctca caggagacca gctggacctc ctttggagct ggtactttcc tccaggcaga
110521 gcagaactgt gaaaacatag gagggtggtt gatcttcatt gcttttacac aagctcactt
110581 tttgccttca agacaggttg gcggaatttt atttttgctt tcactgaatg ccctcccgtt
110641 tctcttgtgt ccagccaaaa cctctctgtt ggtcatggtg cagggcagtc tctctctggg
110701 ttagcctgtg gagatgcctg caggtcgact ctagaggatc cctgggtctt cagaactctc
110761 gactctcttt tgtgccttca gctttcacca tagcaacatc tcttctggtc ccacgtgttc
110821 tttccagctg tgttccctct caaagcccac acacgcagga agcgacctgt agtaaagcca
110881 tttactacag aacacagagg ttcctgctaa agtctacata ttatgtaact gaagatactt
110941 gcattgtaag ctttgtcacg acttgtggaa agaaaagttt tgctgcgcct gaaagaatcc
111001 caaacctgag agagaaaaca gggaaaaaaa aaaaaaaaaa caggcgaggg gtcggcggga
111061 ggtgggggga tgggtagcct cagggcctca cccactcttc tgtattgttg ggggtgagga
111121 gggcctggcc gtgcaggttc ctctgaggaa atatgcctga cgaggctgag cggtgtgttt
111181 gcacacacct gtgtgggctg tggtccaccc tcttgcacag gtcgtttctc ttgtcgagtt
111241 gctggaaaaa gagaggaagg gctttgtctt ctagcccaga ttaatagagt gtgtgattgt
111301 ctctgtgctg ctgtaaccaa ttatcacaag ctgggtagct taaaacaaca gaaatttatc
111361 ctctcacagt tctggtgccc aaaagtctga aatcaagatg tcagcagcag gccgggtgca
111421 gtggctcatg cctgtaatcc cagcagcttg ggaaagcaag gtgggcagat cactaggatc
111481 atcagtttga gaccagcctg ggcaacatgg tgaaacctgt ctctaggtaa aataaaaatt
111541 agctggatgt gtgtcatgcg cctgtagtcc agctactttg gaggctgagg cacaaaattt
111601 cttaactcag gaggcggagg tgccgtgacc aattcgactc tagagtatcc ccctattttt
111661 ctgttatgtt gatgtttttc ttattgaaac atattatatt taaatatgaa agatattaat
111721 tctttggcat atttgtggca aatagtttcc caagtgtata gcttactatt tattttatct
111781 cactgttggt gtattttttt aattagccat atatattgag aattggattt tgaaaaacga
111841 gaagtatact atatagtcag ctattcctgt cagagaaaaa gagattctac atgtttatct
111901 ttgttccagc caaaaacaat tttggcaaag gtttggggaa ttgagagtgc atcagatctg
111961 agctgggctg ctcatttatg aagcattttg gaataacaaa taatgacact cagcatcggg
112021 ccaggcactt aatgagtgtt caatacctac ttcttaatca atggctgatg gatgagttgt
112081 tctaatacac cattctaact cagctgttgg gttttttact aagagaaaaa taagaattct
112141 gatttggatt cctatttgtg catggtagcc atgaaatttc atacacagga gcccattgca
112201 tgcagacaga actacacgaa catttcttca agcatttaaa caggctgata tcctggtgta
112261 gactttatca ctgacaaaag ggaattcaga gatcaccata acaaccctta ttgccatcaa
112321 atattattaa ttagcctgat ggtggaaatc acttctgaca tatcttagtt tagcggagca
112381 aattagccaa acctttccta gtatgttagt ttttatcttg aatttagaac agaggaaagt
112441 attataacct aaggaccatt atggtgtgta gggatggcca taggattttt gttttgtttg
112501 gttaactggg atgaaggtaa ggcataacct gtgttgatgt agagaggtag aggttaaatt
112561 cggatttagc gcgcttacat gcctgcaggt cgactctaga ggatccccac ctgaactcac
112621 tgtggggaaa agaaagagaa atcagactgt tactgtgtct atgtagaaag aagtaaacat
112681 aagagactcc attttgttct gtactaagaa aaattcttct gccttgagat gctgttaatc
112741 tgtaacccta cccccatccc tgtgctcgca gaaacatgtg ctgtgtcgac tcaaggttta
112801 atggatttag ggctatgcag gatgtgcttt gttaaacaaa tgcttgaagg cagcatgctt
112861 gttaaaagtc atcaccactc cctaatctca agtacccagg gacacaaaac actgtggaag
112921 gccacaggga cctctgccta ggaaagccag gaattgtcca aggtttctcc ccatgtgata
112981 gtctgaaata tggcctcatg gcaagagaaa gacctgaccg tccaccagcc cgacacatgt
113041 aaagggtctg tgctgaggag gattagtaaa acaggaaggc ctctttgcag ttgagataag
113101 aggaaggcat ctgtctcctg ctcctccctg ggcaatggaa tgtcttggtg taaaacccag
113161 ttgtatattc catctactga gataggagaa aaccgcctta gggctggaga tgagacacgc
113221 tggcggcaat actgctcttt aaggcattga gatgtttatg tatgtgcaca tcaaaagcac
113281 agcactttt tcttaacctt gtttatgata cagagacatt tgttcacatg ttttcctgct
113341 gaccctctcc ccactattaa cctattgtcc tggcacatcc ccctctctga gatggtagag
113401 ataatgatca ataaatactg gaggaactca gagaacggag gcggcgcgcg tccctcataa
113461 tgctgagcgc cagtcccgtg ggccaacttt cttcttctat ccggcctgca ggtcgactct
113521 agaggatccc cagactgtgt gctgatttac tgtggtgaat tgaagatccc aggagtggtc
113581 taagggtaaa gtcgatgggc ccacaaccaa agagcaagat gccaaggctg aaagaattct
113641 ttttttttt aatcaactgt tgttttgtg tgaccttgtt tacagggtta gagatttctg
113701 aactctcttg gagaaaggtc cacttgttgc tgcatagaac aaatgggctg agtaggtaaa
113761 taacaaccca tcttcagaag cttccgtgat aaaagccaag ccctggcctt ggcaatatct
113821 agttcgcatc acatcagttc ctccggttat atttcaccct tttaacctct ttctcctcct
113881 cctgggatgc tggggccatt ctttgctcca agggcagact gccatggaga ctgaatcctc
```

```
113941 tctggaagag gtggggctgt cacactgagc tgaggcctct tagcagagct cattccaaag
114001 ggaagcccag cccagtggag ccacagtgat ggctgttgtc cctgccagct caccttgagc
114061 aaatcacaga gggagtcggg cactctgctg aggactctag ccaccatcac cttttccttc
114121 tcgtgctagg tgtcagaaag gggttgattg ggtggactgt cagaatctag aaagtatatc
114181 ttggtatgaa gaggagtgtg ggagggcttg ggggtcagaa gactgagttt acatgacagc
114241 cttgttcttt gtactgtgtg tgcttgggca agttatgtaa actcagatgg actaaaaatg
114301 ggatctgtct caaagtctgt gggcacgatt aagtgatgat ataggcagaa agagcatagc
114361 acagtgcctg gtacatgtga actgcttata acccagagtg ataactcctt ttttaattaa
114421 gagtactgtc gactctagag gatcccctga cttgccttag atcaagccca agtgtattaa
114481 tgcaaactca gatattcaga gttgagtagg ttgttcttat gattttgcca aagtgcctct
114541 taaaggataa gaacagggat tcccggctgg gtgcagtggc tcacgtctgt aatctcaaca
114601 ctttgggagg ccgagcgggg cagatcacga ggtcaggagt tcaagaccag cctggccaac
114661 atggtgaaaa cccatctcta ctaagaatac aaaaattagc tgggcatggt ggtgtgtgcc
114721 tataatccca gctactcggg aggctgaggc aggagaattg cttgaaccag gacccgggag
114781 gtggaggttg cagtgagctg agatcgcacc actgcactct ggcctgggct acagagtgag
114841 actccatttc agaaaacaaa acaaaactaa acaacaacaa caaaaaccca gcgattccac
114901 cctgtgaggg cccagcgggg gtctgggaat ctgttgtttt acaagcactg ctggtgattc
114961 catcgcaagg ccaggtctaa gacagcagct ctacactggg gtctggggat ggtggaaggg
115021 ggacgcatgt cagtcagaat tacctgggga ggttttgca aatgcacatg catcctggat
115081 ctagggaatc agagtgcagt ggtgttgagg tgactatgta gaaagtgcct gcttctggtg
115141 ccactttcat ctcagctgag aaccaacaca tgaggaagct tctggggagc ccagccaggt
115201 ttctctgtgg ncaccgctac attggtgacc ctgaccaagc agaggcagcc ccaggcattg
115261 aagtctgggg caaaactggc aacgattgtg gccaggcggt gattaattct gaagttttgt
115321 aagaggttct atgggcagtt gggatgacaa acaccttcat gcctgcaggt cgactctaga
115381 ggatcccccc gtacagtcat agattggcag tagttcccga atgactggat tacaaaaatt
115441 atgaaaacac agataagaag aaaatataaa ctcaaagtg atcattgaaa ttttggtatg
115501 ttgcatacac ttgacttatg ctgcaggatg ggtttgcatc ctacccacc tcctttacgg
115561 agcccctgca tcatgcaatg gaggagtggg gagaagtgtt agtggtaggt gagctcagaa
115621 gcctgaaggg tctggttgtt tcatggtgca tagttgtgta cctctgctct ttccatccct
115681 cccacaaccc ccaccagcag aatctgaact gtctcttgtt ccccattctg cactccaaat
115741 aagcatggct gaaaatgggt ggtgactaac ccaaaggcca caagaaggac aaggcaagtt
115801 cctgaggaga aggcaaagtg gttgaaaggt cctcacagct gcaaggccag gaaacaaaga
115861 acaggacgaa gctctgaaag gtgctactgc ctgaggtggg tacagctctc agggattagg
115921 acagtggcag gtagtgtctg ccgaggtggc agggctggtg gaacggctag cagtgcaaat
115981 cttaaatctc ccacagtgtg atcttcctat gggctgggat acaatgatag aacctggaga
116041 aatgactgaa agtctcgaag atgcggtgtg agtttggcta acaccaaagg ccattttgtt
116101 gctcacttac taagtgaatc gcccttctta tctctcctcc ccttcgccct tgggaggttc
116161 cttccatgag aatggactgg gtcaaggatg attattatta gcaagtaaca actaactttt
116221 tcagggggct ggaacaagga tgggaacagg ccctaacatc taggccaggt tagatgactt
116281 tgtgatcgac tctagaggat cccctaagta tgacacattt gatttactaa aggcttgagg
116341 caactagata gatagataag acaaacagag agggagagag agagagagac agctagagtt
116401 attataaaga attgacttat gaagttatgg aggctgagaa gtcccacaat ctgctgtctg
116461 caagctaaag acccagaaaa gacagtgata gaatcctggc acaagtccaa agacctaaga
116521 ataaagggct gctggtataa gtcctagtac aagaacagga gaacactcat gtcttagctc
116581 aagcaatcag agacagagag aggtttcagc tttcctctgc ctttttgttg tattcaagct
116641 ttcgagattt tgcgtgattc cccccagcat tggggagggc aatttttttc acagtctact
116701 gattcaaatg ttaatctcat ctagaaatgc actcacagac acacccagaa taatgtttgg
116761 ccaaatgtgt tggcatccca tggcccagtc aagttgacag ataaaattaa tcatcacatt
116821 tccacccctc atcaacttgg cacctataca cctctccata aaccatactt aatctccaga
116881 taggacaata accacatcat atatgcacct aacatgatac agccatccca catacaactg
116941 aaaacacact aactcctgtc ccggaagaac atgtanagtc cttaagtgat gcttactctt
117001 ctccttgatg tgctataact taaatgctat gtataaatta acaatatata agtactatga
117061 tataaagtca atacatctca tgtttgaata ataacagcgg aaagaaaaca gaaaataaac
117121 acaggcttgt tttttctttaa cacacacaca cacacacaca cacttgtgct tcttgcttta
117181 aatatataaa tcctctggat gtgtattagg tcattttcaa ctcatgcctg caggtcgact
117241 ctagaggatc ccctcacatc caggtcatgc tgatgcaaga ggtgggctcc catggccatg
117301 gcagctctac ccctgtggct ttacaggtta cagtcccct cctgcctgct ttcatggact
117361 ggcattgagt gtttgtggct tttccaggca cgtggtgcaa gctggcagtg aatctatcat
117421 tctggggtct ggaggatggt ggccatcttc tctcagctcc actaggcagt gcccagtggg
117481 gactctgtgt gggagctctg accctacatt tcccttcttc attgccctag cagaggttct
```

```
117541 ccatgagagc tctgtctctg cacgcaactt ctgcctaggc atccagatat ttccatacat
117601 tctttgaaat ctaggtggag gttcccaaac ctcaatcctt gacttctgtg cacctgcagg
117661 tgaacgccac ttggaagctg ccaaggcttg catcctctga agcaatagcc tgagctgtac
117721 attggctcct tttagccatg gctaggacac agggcacaaa gccctgagac tgcacaaagc
117781 agcaaggccc tgtcctggcc ccaaaaacca tttttttcctc ctagatctcc aggcctgtga
117841 taggaggggc tgctgtgaag acctctgaca tgccctgaag acattttccc cattggtcta
117901 gcaattaaca tttggtgtct cattacttct gcaaatttgg gggtttttcct tttccttgtt
117961 tttttagttt tggtttggtt ttgttgtttg gtttttggtt ttgagacaga ctctcactct
118021 ggtccccagg ctgtagtgca gtggcatgat ctcagctcac tgcaacctct tgcctcaggg
118081 ttcaagtgat tcttctgcct taagctcgca aaatagttgg cattacaggc atgtaccaac
118141 caaactgggt taatgaaagg cggggaggtc gactctcacg aagtatcccc tgaacatata
118201 ttttttagct gtcagagtct ctaatggaaa gtaggtgcca aatgtttgtt ggttgagtaa
118261 ataagtgaat taatattaaa aggtaggaat tgtacgacca aagcaatatg aaagttgtct
118321 tatgggtata agaaatatgt acataaagca taaggcatat tgtataggga aagagttcat
118381 agtgttgctt catgaaatga ggtatgggta tagtataaat atacagttgg aaatttgaag
118441 cgacagatgg catcaatatt cagtagtgtt cttccaggat tttatacaag aatatggctc
118501 ttaatagaac agtgggactc ttaagtatat gggctatccg tataaaaagt gccaattagc
118561 tcatgaacat tgctcacaga tttttaaagg agtgaccttg gaagtagttt agaaacccct
118621 tgacttcaag gataacagca aggactcttg tgtcatatta tctacagttc tgttttaaat
118681 tgggaatatt gcttgagcag ccactgcttt ttcatccca actgtgatgg tggcataaga
118741 aatcatccaa tctaggatca gggtatggaa ggagtatgca cggtgagaag tgagtgcggg
118801 aattggaggg ggtatgaggt gagcagggggg gtcacagaag tggtagacgg agaatagcgc
118861 tgtgaaccat gagagcaggt tcggattgtc gcgggagtgt ccgaaaacgt taaagcagct
118921 tgtttgggga accggagctc gcaagttcgt aaatacatga gttcataggc tagtgatcct
118981 cttgtgagaa ttaggaaagc cgggtcgaaa gtttccacat caagcttgag tgagtccggt
119041 gggcgtgtaa tgagtaaacg gtcaggggtg tgtctagaat ggaaggtgac gctactgcat
119101 catgtactgt gcagtgtggg gagacgctgg tgcggattga ccgagtgtag gtgaagactt
119161 tatgccagaa ggtggaggct agaggatccc aggactttgg gaggccgagg aaggcagatc
119221 acctgaggtc aggagttcaa gactagcctg gccaaaaggt gaaacctgtc tctacaaaaa
119281 tacgaaaatt agatggtcat gatgttgggc gtctgtaatc ccagctactt aggaggctga
119341 ggcaggagaa ctgcttgaac ccaggaggca gaggttgcag tgagccaaga ccatgccatt
119401 gcactccagc ctgggtgaca gagtgagact ccatctcaaa agacaaaaca aaacaaaaca
119461 aaaaaacact ggaacaaaca tgcttgccta gacttgttca ggagtggtca agaacaggaa
119521 aataagattc ttctcccatc tctctttctc tcttctccac tttcttgacc aagagaagga
119581 gaaggctaag cactttctca aaggcaacat ataatttgct tctagaccag tactggtttg
119641 catcttgtct ttatttatct ggtccttcag tctgaggatc aatcacagaa ttctcctcaa
119701 tgttcctggg tttactccag gactcccatt caagatctct ggagcctgaa atcagcgaac
119761 tgaggacaaa tgcattccct ttacctttcc catgctccta tggcttgagt tgtcaaaaac
119821 tccgtttacg aggacttctg tgggtctgaa agcaccaatg cgaaatttga cttattgatg
119881 acgtgtgtag cgcagtcagg ttggtcatag ccagatgtgt gaacgtgtgg gttgttacaa
119941 caaaagcaga ggatgcgtgt tggcgctgaa cagtacgcga tgttaggatg agggagtttg
120001 ggcatggacg acctgacaca attgcagggg taggttccga cgagtggcgc tgataagggg
120061 ttgtttcgag gtgctagaag tctcccatgt tgtagtggta tgaaaaagca gaggtgggtg
120121 tgtggcaatt tgccgagtag aggggacgg gtgtgatgcc tgcaggtcga ctctagagga
120181 tcccctattc taagggctgc atgagaagag tctgccagca ggacaccatg tggtgccacc
120241 tttttaactc tgcccccatc tccctgtggc tccccaaggc aggaccctcc attgttctgc
120301 tggggctcac gggaagcagt tgtcctgggg actgcactgt gaagcttatc cctccctcct
120361 ggcaatgttc aaattcaaga attaaagaaa aatgtcgcaa acgggacact agaagttaa
120421 gtctcagcca caactctgaa ctcagtatac aaaaaaacct taccacagat gtgtcaaact
120481 caaataaaat atgtagagtt gaggccaggc acggtggctc acgcctgtaa tcccgctact
120541 ttgggaggcc aagaggctag aggatcacct gaggttggga gtttgagacc agcctgacca
120601 acatggagaa accctgtctc tactaaaaat acaaaattag tcgggcgtgg tggcgcatgc
120661 ctgtaattcc aggtactcgg gaggctgagg caggagaatc acctgaaccc aggaggaggc
120721 ggaagttgtg gtgagccaag atatatatat atatatatat catgctggag agagagagag
120781 agagcgagag agagagagag agagcgagag acgcgactct ctacatttca cgtagtattt
120841 gagatatgag gattggaggc gggcatggtg gctcacgcct gttatcccct cccttggggg
120901 gggcgaggca ggtggattca cctgaggtcg agggtttctg aacagcctgg gcaacattgg
120961 tgagccccgt tctccacaaa aaatatcaaa tgtgaccagg ggtgggtggc ccatattttt
121021 ggtccccact tattgggaag ctggtgcagg agaattcatt tcacccaaga ggtgtagggt
121081 cttgtgaacc ctgcctgcag gtcgactcta gaggatcccc ataacttaaa gtataatttt
```

```
121141 tacaaatttt aaaaaagaac taaaaaagaa acagtcagac aaatccaact gaggattatt
121201 ttgcccagta actggcccac atgctttaaa tatgttgatt tcataaaaga taaaaacagc
121261 tagggagtat tgtagattaa agaaatctaa agagacttga taaatacaat atttgattct
121321 acatttgtgc ctagattttt tttaaaaagc tataaaggac atctttgaaa agttatgaaa
121381 gacaactggg aacatttgaa tataaaatga ataataatat ccttagttaa atataatcct
121441 taaatttact cagtgccata tttacaatta tttataatat gactttgtat ttgaatgccc
121501 ttgttcatag gggaaatgca cacgaatggt taagcataaa ataccacgat gtctgcaaca
121561 aacttgaaag ctctcaaatg gttcagtcaa ataatgttga tgatgacgat aatacgctca
121621 cccccaacac acacgtagag agaggaacta taagaacatg tgttaaatgt ggaggcacgt
121681 gggagttcat tgcatttgcc tatcagcttt tccaaaaatg tttgacctgt ttgcaagcta
121741 agatcgggtg agagagaaaa tgggattatt ctggactaca catacttaac cctcatttcc
121801 agccactggt atatggtgag gccgtatgtt gactacgaag tggcatacac ccgcttctta
121861 gagaccaata ttttttgaag gcagcgccga acactggacc ttgctttagt gtttcgataa
121921 ttgttatgga gttgacaggt ggttgattct ggtgaatggg ataattggtt ccttggtggt
121981 tattggatcg caggccttga tctgttaaac gtgcttaccg aggttatggc aggttccaca
122041 ttacgactct agaggatccc attaacccaa aattggaagc acacctgtga acaattggct
122101 ggctgtacaa cagggaggga attaaggcta gtgttaatag cacaaatatt ctaaagtgag
122161 gttgaacaag ttcttttaaa acattaagat aaatatcaaa tggccaaggg acaaatagtt
122221 ctcatattga agcacagaaa aaaagtaaaa tttttaaaat ttattttcta agattagcat
122281 aaactggtaa agacacacac acacacacac acacacacac acacacgt acctatagac
122341 caattcggtt tgtgaataca aaattgtaag ttttaaatta aattctactg gatcaatttc
122401 agttgggtat tgaaataaaa taatgcatca tggccaaata cagtttattc tagaatataa
122461 agatactttg gttggaggat atctattaat aaaatatgtc ataccaatag aacaaaggaa
122521 aaataagtga ttgtatgagc aaacaccaga aaggcattta tgaaatttga cccctataag
122581 ataaacagat aaaaagtgct tatctatttc aaaccagttg caaacattat acataatagt
122641 gaaacaatag aggaggggag agataagaca aattctaaca gatgcagtaa gatatggagc
122701 acgtagaaat ggaatgtaat attttttagg aagagcaaaa tgataataat ttattaatag
122761 cgaactttca cagacgaatt tgtcttcagg cactgtgcta acaattttat tggggagtag
122821 gccaattatt tgtgtttcag caacgttatg gaagtaggta gtatttcacc ccttccgctg
122881 ccatttaatg gtgtgagttt tggagcgcag gaaggtttca ccacgtttcc tgagtttgcc
122941 agctattgca tgggccggat tttgaaccag tccatcctgc ccgaagcagg agtggatgag
123001 tatgctgcag gtcgactcta gaggatcccc taggagctga caatctagca gtcactatca
123061 ggcatgttgc aacaaacacc cagatggccc tggtgacggg agaattctac tcttctgaaa
123121 atcaaaaagt attgattggc tcaaagagtg aggaggaaca catattcagt taaaaatata
123181 agctctccag aatgtttga ggggaaatgt taagttttgg ttgacttggg atctgatttt
123241 agattgctga taagacaaaa tgtatgttct aactgttggg tgcatagtag ggttgctttg
123301 gaacagtgtc ttgtgttgat gagtaattct gcgccttgaa cctgtgccac cacaatttca
123361 gttaaaggct tacaagtcct atcagcttct cagaacattt tttttttttt caaaaccact
123421 tttgtgtttt ctgaaccaga aatctgcttt agtgcttagc aggtttcatg tttcagaact
123481 gtacttttag agtgtctcta gacaacactg aaaggcacac agagagaaat gttgatgtgg
123541 ctgggtgctt ggtttgttcc ccgtcttggt tggcggttcg gggcggggtg gtggaggggg
123601 agggttaaga attatagcag gtgtctgctg gctgagaggt cagtaaacaa ttccagatgc
123661 tttgaaggat ctagaatttt caggcagctt ggctctggtt ggacatttaa aaattgagca
123721 tacttaaatc ctctaattca tatatgatca ccccccaaca aaagtgatag agggtctccc
123781 cttagataaa aaatttggga ttaataatgt actttaacag tagatctagt tttaaaaac
123841 tagatgggtg ttacaggtac agtaatggaa ggcatttttc gttcatttt atttggaaaa
123901 ccatcttata catcggaaag ctaggtaaat taattcattt ttatgccggc ggggtagagt
123961 caagaggatc ccatatttga atttcctcaa tcagatacaa gaggggtcat atgtgaagct
124021 gatatgagga ttatatgagc tattctagtt tgcagtcctt aggacagagc ctggatctgc
124081 tagatgctcc ataaacattc gctcttgtca atatgtatcc atgtaaagcc ctgcacagag
124141 tctgcaccaa acagatgctc cccgcttccc ccacctctta cttgccaatt tttctcctaa
124201 cttaaatgag aatggatttt accaaaaacc gagtcacagt gttgcgtgct ttctgggatc
124261 tgacctcttc tcactccctg caatgggttg aatggtggcc ctaaagacat gttctaacct
124321 ctaatcctgg aacctgtggc tattccctta catggcaaga gagtgactat ggccttatat
124381 ctgaaaggat gtgactaagc caaggacttt gagaggagga gtttatcctg gattatcggg
124441 gtggtaccta aatgcaatgc acatgcatcc ttaaaggaga ggcagaggaa ctttgaaaca
124501 ggtacacaga ggagcgatgc acacaggcga ggcgaggtga aatggtggg cagagaacag
124561 agtgatgagg gcaaagcag cgcaagctgg aagagaccag gggaagattc ttttcctaaa
124621 ggttgctagg aagacggacg cccaacggaa ctatttattt tttctttttag aggtgaggag
124681 cctgattacg gtcaccacag gcctgggagt aacagtgggc ggcgattctt ggagtgcact
```

```
124741 ggaaaacgtc ggacatactt gaggtgaaag gaagagtctt ggtgggctca agacagtgcc
124801 caagaaagca tggggagtac agagggacat gaacgaccac aatgcacgag ctgaatatgt
124861 gttgatgttt aacgtcagag aaaagagggc ttcgagcaga gttagggcaa gaggttgggg
124921 tatcacagac acagttagat agaaatgcct gcaggtcgac tctagaggat cccctagtac
124981 aaactgttgg agagacaata atatcttggg atccatcctt aaactgtaca gcttggagtc
125041 ctgcttcttg tgatggagat caaaacggat ggagcaatga actcccaaaa ctctgaaatt
125101 acactcagtg gtttccttgg caaggtgaaa gagccaagca ttgaccaatc atgggataat
125161 gacagaatat ggtcatacct catgtagcat ccagtttgag agaccccaat ttaccatttc
125221 ttgagaaaaa cccaattaca acatttttg ataagaaagt tctctagaca gctctagaca
125281 gtgctagtga gaggtaaagc aggctaggct tctgggtcgg gtggggactt ggagaatttt
125341 tctgtctagc taaaggattg taaatgcacc aatcagcact ctgtgtctac ctaaaggctt
125401 gtaaacgcac caatcagcac tctgtcaaaa gagaccaatc agcactctgt caaacggacc
125461 aatcagcact ctgtaaaatg gaccaatcag ctctctgtaa aatggaccaa tcagcaggat
125521 gtgggtgggg ccaaataagg gaataaagca ggtcacctga tccagcagct gcaatgctgt
125581 tgggttcgct tccaaggtgt ggcagtcttg ttctttgttt cttcccagta gatcttgctg
125641 ctggtcacac tttgggatca cactggcctt ttgggctgta acactcaact ggaaggtctg
125701 caagctcact catgaagcca gtgagaacac aaacccagcc ggaggaatga atctgtacac
125761 tcactgcgta ggtcggtggc tcactctgaa gttcgcgagc cacaagccgg cagaaggaag
125821 aactcgggca cgtctgaaca tcggaggacc aaatcgggga acaacacttc taatgcaata
125881 agacaagaac aggaaataaa aagaatgctg attgggaagg aagaaataaa accgtctgtt
125941 ttcagatcac atgactatct atgtataaaa tctgaaagaa tagacaaaaa tagctctgaa
126001 actaagaagc aattatagca agatttcagg atacaggcta atatacaaaa gttgatcatt
126061 tttctatata ctagcaatga gcaaatagaa tttgaaatta aaaatacaat accatttaca
126121 ttagcacccc ccaaaattaa atagttaggt acaaatctaa caaaatgtga tacaagagct
126181 atatgaaaaa atctataaaa gtgtgatgaa aaacatcaaa gaactaaata aatggagatc
126241 tacatatggt aagggtaaga gcaaaataaa aattataaaa ataaataaat aaatggatat
126301 tgcatgttca tggttaagaa gacttaaaat tgttaagata tcagttcttc aaaatttgat
126361 ctatagattc aatatagtcc ctatcgaaat accagaaact tatcttgtag atgtcaacaa
126421 actgattcca cagtttatat ggagaggcaa aagacaccga atagtcaaca agatagtgga
126481 gaacaaagtt gggtgactga cactactcaa cttttgagact tactataaag ctacagtaat
126541 ccagatagtg tgatgctggc aaaataatag acaagtaagg tcatgcaaca gcatgggacg
126601 ccgggaaata gacgcccata atcagctgat ttttggacaa aggagtagaa gccataccat
126661 gaaggagagg gggtttggtt gcacaaattg gtgctgggac acatgggca tctgcctggc
126721 aaaacagtaa ccttgggcgc cggacgtatt cgcttgccac aatttggctc gtgactgatt
126781 ccagaactga aatgtgtaag cgtntcgact ctagaggatc cccaagcaat aaagaagtat
126841 caagtaatct cttttactgat aatactgatc aggatagtaa tagtggcagt gtattgagtg
126901 tttactctgt tccaacgact gtgctaaatg ctttatataa atcatgttgt tgaatcctca
126961 aaacaacttt attaagtagg tactataatt attgccactt taggggtaag gaaacgaacc
127021 cacataaagt ttaaatcatt tgccaggatt ttattccagg ctgtccgaca ccaaagacca
127081 tgcctttaaa tatccagcaa tctgtaatgc ctcataagag caaagggagt tcaaagtggg
127141 gagatcagca tgggatggat gagaccttca cggaagaggg atcctggaga tgtagatgtg
127201 gtttggggta aagagaggat ggagaagacc ttccaaggaa ggagggagaa ggagagggag
127261 agcacacaca ggctgagaag tgaaaatgca caaagctcat tggggtccca gagttaccct
127321 gctgccactg cacacccttt ttgcatggat gttagtgggt ggataatggt ggtcaggtga
127381 cagaagcaca tggaagttag gattatggaa gggcctcctt gaaaaaagcc ttcagaaatg
127441 agagggaaat aaaaacaatt gaaaccaaaa cagagttgat gaggtggacc taattaaact
127501 agagagcttt tacacagcaa gagaaactat caacagggta aatagacaat ctaggggaac
127561 gggagaaaat atttgcaaac tatggctctt gaaaaagtct aatattcaga ctctgtaagg
127621 gaattaaact aatgcacagg cagagagcaa attaactcat tagaaattgg gcaaggacct
127681 catcaggcac ttctcagaag acttgcaagt gggcaacaaa catattgagg gatgctcatc
127741 tgacttacat gcctgcaggt cgagtctaga ggatccccat ttggagagca tatatgtatg
127801 tatattgtgt ggccccagaa ttaccaggta cagattgtat cttctgtcaa ttaaacacct
127861 ttttcctgtt atgctagaag cagcaatttt ataacacgta ataggccat gtatttttca
127921 acacagtgat caatcacact gcatatttga atgtggcaga tgtgattagt tccattctat
127981 gtgagagagg tctccaggag acatttattc tgaaacagga cgggtcccca gcagattatg
128041 tcctcccatt tagacagtgt attgccaata aattcagcag atggagggct ggatgttgat
128101 ctagtcaggc ttaccaacat gtgatgattc actcagaagc tttgtgaaat actccttcat
128161 gacaattact aagaccgact gtttaaattc ctctgaccat caacatggaa gcgatccaga
128221 agaacagggt tttgctgagt aacgagggga gcatatagat aatctctaat atactcatgt
128281 ccttggggcc agtctgtggt acctaatttc aagttgtcta aacgttagct ccttcttatc
```

```
128341 tctaagcttc aggatgtcct gcaaacacag ccaatctgcc tcagctgtca cagcaggggg
128401 ctaaagggca gggccatgat tcagaaggaa ttcagcagag acaagagtgg gcggatgtgg
128461 tggccgctga atggcaggag ataatggggt caaggatgca gcgttggttg agctatcagt
128521 gactgaggaa tgattaatga aacatgtaaa cattccccag agaattccca gaatacacag
128581 agagcaggac ttggtaacag actttctctc tgaagacaag taaactgcat attaaggcgg
128641 actggtgact catagactga tgagattgga acngtcctgc aggtcggcgc tggaggatcc
128701 ccccacagca cggaagtctt tattttcttc tgaactcata aaaaatactt ttagacaacg
128761 ctgggcccat gtagctttga catgtttggc cttttctgt aggttttgag agcctgtcat
128821 aacccagcaa agaattttaa cttgctaata gaggttttca gcgatgtctg tgttctcatc
128881 tttacgttgg ctagaatctg cattgaagtt catttgtcct cctagatgat tctgtccatt
128941 atcatctgaa tgcctcgcat gaggatcatt atgaagaaca ttagtctggg tgtcaccctc
129001 ttctcccaac aaaatactaa gtagctgaga aaataaaata aaccctattg ccgatccata
129061 gaggaaggtt aaaaaattca gccaggattt agaggccatc tcggaaagtg tatttctgtc
129121 atcggccgtg gctccctctt gcccctcctg ggggcagtag agggcgacga catgggaccg
129181 gcgacttttg cttctctggg cacccgcaga atgtggctcc tggtcgctag ccgaggccgc
129241 caactgccgc ccagatcagt ctccggcagc agcggcagag ttttaaataa aatataatct
129301 gcgtgtcttc acatgcttct ttcttcctat ttcttcatgt ttcgtccatt ttctaccctc
129361 agagtctctc accctgtgtg tatgctggga tgctctcttt atgcacccgt acagaagtct
129421 atctgttgta aagcagtgag agaggcaaga cagtcaaaac atgctcctca tgtaagcagt
129481 gtgggaagaa catagatgtc aatagattag aagagagaga gagtagggag agcattggga
129541 ggagacaagg aaggactgag ggtattgttt gtttatgtag aactttaaga acacttaata
129601 gtggggtacg actccgcaga atcacctgta taaattaaca atatataagt actatgatat
129661 aaagtcaata catctcatgt tgaataataa aagcggaaag gaaaacaaaa aaataaaaaa
129721 agctttgttt tcgttaaaga cacacacaca cacacacaca cttttctttc ttctttataa
129781 tatatatatc actatgtatg tgtattagtc cattttcata ctgctataaa gaactgccca
129841 agactgatta atttataaag gaaaggggtt taattgactc agttcagcat agctggggag
129901 gcctcaggaa acttacaatc atggcagaag gcaaagggga agcaaggcac cttcttctta
129961 aggcaggcag gaaggagaag tgctgagcaa acaggaaaga acctcttata aaacacatca
130021 gggctgggca atagtggctc acgcctataa tcccagcact ttgggagtcc aaggcatgta
130081 gatcacgagg tcaggagatt gagaacagac tgaccaacgt gctggaaccc catctctact
130141 agaaatagca aaaagaagat tggctgggca tggtggcaca cacctgtaat cccagctact
130201 caggaggcca aggcaggaga atcacttgta cctggtgggt cggaaggttg cagtgatcaa
130261 agtattgtgg ccaccgccct ccaggcttgt gtgggcatag gtgacattct gtctaatcac
130321 agaccaaaaa aatcaggatg ttgtgatgcg tctgcactca cctagtctga gtgtaacagc
130381 attgtggggg tactaatgcg ccatgatgta agattaacat gtctttgagc agatgtggga
130441 attgagaggg gatttgtagt tacaagagtg gtgttttgag ggtggggtga acaaaatcca
130501 ggaccattat cattatccaa acattgtaga cctcgccgaa tactcgaatt gcgttgaatt
130561 gttatgagaa tcactgaaat gctttccaaa ggggtgcccc aaggtgttgg tagaggatcc
130621 tcgaacaata tcagtaggaa aggtgtctaa atataatttt tgattaagag ccaaataggg
130681 caacaaatgt tgaaatggtc aaaaaatctc tataaaggac atatattttg agctatcaga
130741 gtctctaatg cagagtaggt gccaaatgtt tgtttgttga gtaaataagt gaattaatat
130801 taaaaggtag gaattgtacg accaaagcaa tatgaaagtt gtcttatggg tataacaaat
130861 atgtacataa agcataaggc atattttata gggaaagagt tcatagtgtt gcttcatgaa
130921 atgaggtatg ggtatagtat aaataacagt tggaaatttg aagcgacaga tggcatcaat
130981 attcagtagt gttcttccag gattttatac aagaatatgg ctcttagtaa aacagtggga
131041 ctcttaagta tatgggctat ccttagaaaa agtccaaatt agctcatgaa cattgctcac
131101 agatttttat aggaatgacc ttggaagtag gttagaaacc ccttgacttc aaggataaca
131161 gcaaggactc ttttgtcata ttatctacag ttctgtttta aattggtaat agtcttgagc
131221 agccactgct tttttcatcc ccaactgtga tgggtctcat aagaaacatc caatcatgga
131281 tcagggtagg gaaggagtat caaggtgaga agtggtctgg gattggaggg gtaagatgtg
131341 agcaggaagg cttatagtgg tgaggggata agcctgtgac caagaagcgg ctctaatttc
131401 acaggacac tgacacatta tgctactttt ttgttgagta cccaaagagg tggggtgctt
131461 ggatgttggt ggattggctt ggatttaata gcctaggata acatttatgg tatggatgga
131521 acatgcttct ggtcgactct agaggatccc catggaggtt tcagctcttg attcagctcc
131581 accacttgtt gaaaagaaac cctgccaaga tgcaaagggg agtagttata aaatatcaag
131641 cagacctgcc ttgggtggca cacacagaca cacacatacc cctctcattc tctctgtttc
131701 tctctccatc tcaatgtttg ctaccggctt actgtgtccc agagtaaacc ttcaaagaat
131761 tgctgggaaa atgccttcaa agtctttgaa ccatgactct ctgactctct tcttgcttcc
131821 aaatcctccc cagcagagtc atttcaggtg atcctgaatt ctacacccga cagtgaaagt
131881 agtggctcat gaccctgcat cactatcaca taagggagtc cacgtcaata cacacaacca
```

```
131941  aacaaatcag  aataggctca  agaaatctat  tgtccagaga  gggcaaaacc  aagagtaagg
132001  tgaaagaata  ataatcacta  atgtgtaacc  gagtgctttc  tattttcaag  gggaatgatt
132061  aactaaaagt  tatctattcc  tttttttcaag  gagagcatcc  tttgcataaa  cttgccagcc
132121  cgtctctgtc  ttcagcacag  acaaccccac  agttgatttc  tgttggccca  gaaagagcac
132181  cttgtctgag  ctactgccag  gaccctgtga  gaatagtttt  ctgctgccct  ggactgtggt
132241  ttcagtcaac  attttcatgt  tgccaagtac  agcagaagtg  gggacccggg  gactttcagg
132301  atttgactgt  tttcctgtat  gtgaggggga  aaccaaagtg  gttctggaaa  acggcttttt
132361  ttttccatcc  ccctaacctg  gggtttcatt  ttctcggcac  cagtttctcg  gcaaaaacta
132421  agagagggaa  aaggtttttt  ttcgtatttg  cacggggcaa  agcccccgtc  ttatgcctgc
132481  aggtcgactc  tagaggatcc  ccccctttag  aattagaagg  aatcttagtg  aatatataac
132541  ccagcacctt  cactgtttat  atgtgaagac  tgaaacataa  agggattagc  agtggtacag
132601  tggagtaaat  cccatggcca  ctggagctga  ttggacactc  agatcccagt  gctgctgctt
132661  actgtgtgct  ccagctggtg  atatatttat  cccttgcttt  ccttaccttg  taagttaaga
132721  tgattatact  acaaaagatt  gtttgaaact  gttggtgtgg  gttataggat  cgttgtaaag
132781  atgattacaa  ccatcctcag  aggactgtta  taaagattta  atgaagtaat  gcatacaaag
132841  tacctggcac  cacgccgggc  ccacagaatc  acttagtaag  tgctagtgat  tattataaat
132901  gactcaccta  aggtcacatg  gatgactggt  ctccccaggt  caagtgaaca  tcccacactc
132961  caagccttca  cttcctctct  aatgaattcg  tggcagagca  ccctgatatt  gtttggctgt
133021  gccccaccca  aatctcactt  tgaattgtaa  taatgcccat  gtgtcaagag  cagggccagg
133081  tggagataat  tgaatccctg  gggtggtttc  cccatactgt  tcttgtggta  gtgaataaga
133141  ctcacaagat  ctgatggtct  tataaatggg  agttcccctg  cacagctctc  ttgcctggca
133201  ccatgtaaga  tgtgactctg  gctctccttt  gactttcac  atggatgttg  agggctccct
133261  aagcatgtgg  gtgggggtcat  caaacatctt  tgctttataa  atttagcagg  ctcagatatg
133321  tctttattag  caactgagaa  cagactaata  ccaactcttg  ttcattggaa  gttggaaggg
133381  caggattgcc  tggggcggta  aatcttgcaa  gcctgcaggt  tgactctaga  ggatcccctt
133441  ttcaacaagt  ggtggagctg  aatcaagagc  tgaaacctcc  atctttaaag  tttgacctac
133501  tcagaaaatt  gttaacactg  ctttccacca  tttaaacctg  agaccagtcc  acaggtcaat
133561  ttctcacctg  gactgcccag  tggagagcgg  ttttaaagtc  tttatccaca  agggtggggt
133621  ctgcccctt  cttcagcagc  atttgtgtgt  gttgaggctg  gttgtggaaa  gccgcccagt
133681  ggagtggtgt  cattccctgc  aaaacaacag  tcagagagga  cagagatgag  cacaggctcc
133741  caggaagaaa  actggagctc  acactttctc  ctcaggcctg  ggggcactca  ccagatgcgt
133801  tggttgtttc  ctgctggttc  attcattcat  tcattaatcc  attcattcca  tagatgttta
133861  ttgtctgtct  gctttgtgcc  aggcaagcag  ttgttcagga  tacaaaagtt  aataaggtaa
133921  atgagatcct  taccctcatg  gaaattgctc  tgtggtaaag  gaaggcagat  attaaatgca
133981  caaaaacatg  tcaaacaatc  ttccagattg  ataaatacta  tgaagaatgc  acgtaggatg
134041  ctggtgagag  agtaaccaag  ggtggaggga  ctgttctaaa  caggcctctg  aaagaagaaa
134101  tggaggaaga  ggacagccaa  caccaagcac  agaggcagag  agtaagttaa  agggaaggcc
134161  tctgtgactg  gagtgtcaat  ccccaccacc  agggcagggg  tgctgtctgt  tttctctatc
134221  tctaattgct  aggctaaagg  ctggagaaat  agctgttgaa  tgaatgaatg  aggtaggagg
134281  ggagagagca  tgtgtaatta  ggttgaagag  gaggcagggc  tgatctggga  gggttgcaat
134341  acattgcaca  tgggaatgag  actctagatg  ttccttttgt  ctccattcta  gtctaacatg
134401  tctggctcca  accgaggagc  caggatcatc  ttctcacatc  acaaaaacct  cccagctttt
134461  taggagggat  aagcggctgc  aacacagagg  ctaaagcact  ggcctcggct  ttatatggtc
134521  accatcacaa  gacaagcaat  gcaaaacaca  tcccagtgtt  gcaagagaag  gaaggagatt
134581  ggagttcctg  ccaagaagaa  accaccatag  aacatattcc  ttagacatat  gttagcaaat
134641  aagcaactag  tcttaaatcg  cccactagac  tcctttgaag  gtcacctaga  atgtctacag
134701  ttaggatatt  gagctcttat  tgttgttgtt  gttgttttat  cactctgcgc  gtaggcagaa
134761  ttagtacaca  ttaactcgac  tttcttcatg  gcaagtcttc  ttatgagtca  ggcttcccca
134821  actctcccca  ctcatgtcag  gtaaagagaa  aacgtctagg  actcagttcc  caatcagtgt
134881  tcaggaatac  atgaaggcaa  tgttattgga  gtatctctgg  aatcaaaacg  tatcaattct
134941  acagaaacga  agctctcaat  catgcatctg  gtcagctccg  tggtagaatt  ctagaggctc
135001  ctgttagaat  agggttatgt  aaaatgacta  gtttctttcc  ctgttttaat  gaacatattc
135061  gaagccattg  ggaagacgtt  ctctcggttt  cttggcttag  gaggtggcct  gagaccagag
135121  gtgtcgattt  tcttacgtgt  gtctagtgtg  tccgtgagtg  tgctgttgaa  ttggacctat
135181  cctaccccag  ggcggatatg  cttatgtttt  ttggggtgga  cgacccagta  ctagggattg
135241  gtgtagaaag  gggtatactg  ttgcacccag  gagagcaatt  gtgattctag  gcgactccag
135301  aggatcccca  gggtacattt  cataagggca  gggtctttgt  ctactctttc  tttgtctgct
135361  ttgtccactc  catgtcctta  cagcctagca  cagagagggg  cacaaaggag  gtgctcagta
135421  catttcagtg  catgagtgaa  acttcactga  agaactttcc  ttgctcaagc  tgacaacctg
135481  ctcactgaca  ttgtaacatt  ggaacccaat  taaccatcct  tcatgggta  agaactttct
```

```
135541 gacaagaact tctgtagtcc ttgaaatttt ctagtctaaa caagaaacca tgtacttgag
135601 gattggttct agggtttctg gaattggctc tcaaatctga ttaaatttaa ggattctaat
135661 agctttattt ctaggagtaa agagagcatt gatagtccat ggtgtgaagt ggtaatagag
135721 atatgcaaaa agctgcatct gaatattcct aattaatcac tggacacaac aggcaaggag
135781 ttgggtgact gtgtagatga taccctcaaa cattttggga aacttaatga atatggctgg
135841 ttgctcctaa tgtcactgga caaagtgatg aaagaaaagg attagctcac ggattctaat
135901 tcccagctca ggtgccatat agatgacctg gaggtgtgta tgtgtaccct gaaggagagt
135961 cttacctcct gtagccatga ggctgaggat gctgcaatca tatgcaggct ctcatgctgc
136021 agctgcctgg attagcatgc gaattgaact ctgaattaca gcgcaagtca aactccatct
136081 tcacaggatg gtcgctgtta aagtgaggac atggattggt atagaaggga gacctttatt
136141 tggatggtgc atgtgggaag gcctgaagat gctgggggca ctgagcttct aactctgagg
136201 tgtcttcttg tcaatggaat cttgcatgcc ttcaggtcga ctctagagga tccccaggag
136261 ctattaaaaa attaatcatt ttatagaatt ttttgtttgt tttttgtttg ttttgagaca
136321 gagtctcaag ctctgatgcc caggctagag tgcagtggca taatctcggc tcactgcaac
136381 ctccacctcc cagattgaag caattctccg acctcagcct ccctaggtag ctggaattac
136441 agggtgccca ccatcatgcc tggcttaatt ttctatttct aattacagac ggggtttcac
136501 catgttagcc aggctggtct caaactcttg acttcaggtg atctgcccac ttggtctccc
136561 aaagtgctgg gattacaggc aggcgtgacg agcgcacctg gccatataaa actttattat
136621 ggcatgtaag ggctattcca aagtaggctt tccacactga gtcaaagtca tgacagatcc
136681 tgcggaagtt agccagtaaa actgcatttt atggataaga aaattgtagc cactgggagc
136741 tcgcccaagg tcactggctg gttggtatgg agcagggatt ctaacagtgg cagtctgggc
136801 ccagcatcag tgctcttatg actcaacaca ccacctgtct gggactgctc ttgctggggt
136861 gcaagcctgc tgtcctggca cctgagatga gatgggtctt acatcactta ctcagagatc
136921 cgaggacagg agggaggtct gacttggctg atggggggtgt agaatgactc ctgggtcatg
136981 gtaacacaaa atgagaagct cggggaagca caacagaggg ctgcaatcat ctaggaattg
137041 acatagatgc tgggacagta tctcgcaggt caacttcata ccacagaaca ggcagggaag
137101 tcccaggctt ggcaatgaga caactggttt tctgggttca ggctgtatca ctgagacaca
137161 tgctgcagtt tgtctctgga ggttcccttc ccattgctat gtttttatcca cctgtaaagt
137221 cctcaagatt cttttacgtga actgctgaaa cctgctgtct acagttgtct agattgagac
137281 ctgatatggc cacatctcat gcttgtctcc tcctcggtca acatttactg ctgggtcatc
137341 ttctcattgt cttttcccatt tcaaagggca ggtataactt caggctagcc ctccctccca
137401 tgctactttta actgacccat acctattgat aaccaagttt ggctcgcatg ttaagaggat
137461 gtctcctcag gtgatctaga actgcttggg ttacttgccc cattgtaaag tatacttaaa
137521 aatagatgga attattatta tgaagaataa taggataacc ctctatttgg ttcagaagca
137581 ggcttcccac cttcctacat tcgcgtctag gtaacctcga aattttttccg gtaaattggg
137641 aaagatgact gaagattttc ctcctttttac gggaagccat aaaaattcct gatggttgtg
137701 tgtggagcag gggtttctaa cagtgggagt gctggccctc cgcaggcgtg ctttttgattg
137761 gatcaccagg tacaggcaga tctgggagca tcctcgtgct aacaagggtg gaaacccca
137821 tctctggcca caaataataa agaattggct tggggattgg ttggctgggg tgctgttagt
137881 gcccacgcca cttcgggtag ggcttttggc atggttgggg ggtgttgtat cccggttgtc
137941 tgtacttgga tatataaacc cttattttgt tcggggtggg gggccaacct tggggggtag
138001 gaaacgagtt tttggttttc tcgggagaaa aaaagagat gcctagtggt ttttttcttg
138061 cctttgggga gaagggcagt gtgaggttta ctgagaagct acctttggt gtttgttgag
138121 tttctggggg gtgaatcctc ctatgatgcg tgcgagactg ctggtggact ctagaggtcc
138181 ccctctctcc ccctgcggat ttatcctgaa tgctttgaag aaactgcatt cttaggggta
138241 cccagaatga cctatccaca aagtggcgtc tttccacctt taaggagcat gccaggcctt
138301 acactgcacc acgatggctt catgggacaa cattgccacc cactggtaat aaagagtctc
138361 tgtggacctt cacctgggcc ctgagtcaat ctggaactct ttggccatgc aagaacaagt
138421 taaaggtcat tgatacagct ggctggcatt gaaacaaaat tagtctcatg tgactttttt
138481 caaatatatc aggtgacaca aagcatacat atagaaaaat ggtaagagca caagctctgg
138541 ggcctcacct ctagagtctg attctggcac tgcacttacc tgctagctat gtgaccttag
138601 gcaagttgct taacatctct atgtccgttc ttcacttgcc aaatggataa gaatagtgcc
138661 tcccccttag tgctgttctg agagctaaat gaattaattc atatgaagtg cttaaagcag
138721 tgcctggccc agagtaaata ttcaaagtgt gttaattagt ggggtgattc ctcaaagacc
138781 aagaggcaga aataccattt gacccagcaa tcccattact aggtatatac cccaaggaat
138841 ataaatcatt ctattataaa gatacttgca ttgctatcac aatagcagca ctattcactg
138901 ttgagcaaaa catgggatcc aacctaaatg cccatcagtg attaactggg attgggaaat
138961 tgtgatacat atggcacagg gaatactatg cagcaaataa aaaggacgag gtcatgtctc
139021 ttgcagggac atggattggg ttggcaggca ttatctcagc caactaatgc gaggaccgaa
139081 aacgaacgac acgtgtgctc attgtcttct tcaggcgagg aggcggacca tagatgatac
```

```
139141 cgtttatttc aagataattt tgacctctga attcctctgg ttatgtgtct tgagaagagg
139201 tcccagtatt cagagagtca taaactatat tagagcaaga agttatctta atcatcttca
139261 agtttacaca gagacctaga gagctgctaa ttgtcccaat catcatcaga gaaaggaatt
139321 ttcttttatg tgtaagaaga aaattatgga ggtttgaatt atcatttggc tggttaaggc
139381 gacactccca ttgcatgaat gcagtgtcaa caattgaatg acatcaagag atgggaggtt
139441 tcctttacac gctctcccaa aggatgtgtt cacatgtggt tctttcagat aacagttttg
139501 aaatgttgag tgacacccag cacattttct atttgatttc acaatctttt tgtaagacag
139561 aattaaaaaa aaatctattt ccttcccgct ggaaatagag caagcagatt tacatgaagc
139621 tggtgaaagc gagaattaag attttgtgca aaccatggta tggaatagtt ggttctacgt
139681 tagtgctaaa caattggtgt ttagtcacct ttgggcccct aaaaggtgac cattgttgtg
139741 gtgatgtgat gagacccagg cctgtgtggt tttcttgggt gtgaatgggg ggactgaagt
139801 ctttccttgg tgccttagta tgttcctatg ttggcctagt ggatagagtc gggatggttt
139861 gaaggtattt cgaggtagtc aatatggtgg cagccgttta tgttgaggtt taagatggga
139921 attacgttgc ggtcttggtg gtaagtgttt taagcgtgca gagggaggtg tagtgatacg
139981 tgagcaagag cccgacttac ctcgccccag ggatgaggag aatacgtgtc gggagtgcgc
140041 aacgttggag atagtgggtg aatgtaaagt gtaggatctc tagttgtgca gacaaggggg
140101 atttgtgagt gagggatttg tacgtctaga ggatccccaa aacaagaacg caatcccatt
140161 cacaacagcc atacacatac acacacacat acatatacac acacacagac acacacatac
140221 gcaataccta ggaatacagc taaccaggga ggtgaaagag ctctataatg agaattatct
140281 ttcaaacaga ttcttttatt attcttttct gaaagaaatc agagatgata caaacaaatg
140341 aaaaaacatt ccatgcttgt ggataagaag gaatcaatat tgttaaaatg gccatactgc
140401 ccaaaccaat ttacagattg aatggtatgc ctatcaactt atcaatgaca tttttcacag
140461 aattagagaa aaattagaaa aattttaga attagaaaaa aacgattcta aaatttatat
140521 gaaaccaaaa gagcctgaat agccaaagca atcctaagca aaaacaacaa agctgaaggc
140581 gtcacattac ccaacttcaa actatactac aaggttacag taaccaaaac agcatggtac
140641 tggtaccaaa acagacacat agaccaatgg aacagaatag agagcccaca aataatgctg
140701 cacacctaca accatctgat cttcaacaaa gttgacaaaa acaaggaatg gagaaaggac
140761 tccctgttca ataaatggtg gtgggataac tggctagcaa tgtgcagaag attggaactg
140821 gacccettcc ttacaccatg tacaaaaatt cactcaagat ggattataga ctttaaagta
140881 aaacttaaaa ctattaaaaa ttcctggaag attacctggg aaataacatt ctggacatag
140941 gacctgacaa atatgcctct gcctatgttg tcttttctga caaagacacc aaagcatttg
141001 accattgggt actaatttaa tgaaagagct cctgcatgcg aaagaaactg tcaaccgggt
141061 gtacaggatc ttgcatgcct gcaggtcgac tctagaggat ccccttcaac atttgttgcc
141121 ctatttggct cttaatcaaa aattatattt agacaccttt cctactgata ttgttcattg
141181 ttttgtaatg ttagtctttc tgttgttgtt gttgttaaga cagggcctcg ctctgtcacc
141241 caggctggag cgtggtggcg tgatcacagc tcactgcagc atcaacctcc tgggcccaat
141301 caattctccc ataccaccac tcccggctac ttttttttttt tttttttttga gacagagttt
141361 tgctcttgtt gcccaggctg gagtgcaatg gcatgatctc gaccccacca caacctccgc
141421 ctcccgggtt caagcgaatc ttctgcttca gcccccccgag tagctgggat tacaggcatg
141481 tgccacgatg cccggctaat tttgtatttt tagtagagat gacgtttctc catgttggtc
141541 agtctggtct caaactccca acctcaggtg attcacccgc ttcggcctcc caaagtgctg
141601 ggattacagg tgtgagccac cgtgcccagc tagtcttgtt agtcttcata tccacaactg
141661 aattctgaac ttctaagttc tcagaaagca ggagctgaat gagaggtctt ctgtctctca
141721 cagtgctaaa acaatgctat gcaagtagca gtaacagagt cagtaggcag taatagatag
141781 tgggttgttt aatgctaaat gttaaatgcc tgaatgggaa aatcatatat atacatatat
141841 atatagatag gtgcctacct gtggaattgt cttttgagca aatagacgac aagagtgatg
141901 gaagcctgct cacatcacag tgagatgtac acttagccgt gtgattacag tggtaaggag
141961 aaacatactc agtttgttcc gagcccgccc ctgagaggaa gttgttagta atcttaaatg
142021 tctgcaggtc gagtctagag gatcccctgt ataaaatctg aaagaataga caaaaatagc
142081 tctgaaacta agaagccatt atagcaagat ttcaggatac aggctaatat acaaaagttg
142141 atcatttttc tatatactag caatgagcaa atagaatttg aaattaaaaa tacaatacca
142201 tttacattag cacccccccaa aattaaatag ttaggtacaa atctaacaaa atgtgataca
142261 agagctatat gaaaaaatct ataaagtgt gatgataaac atcaaagaac taaataaatg
142321 gagatctaca tatggtaagg gtaagagcaa aataaagatt ataaaaataa ataaataaat
142381 acctattgcc tgttcatggt tacagaagac ttaaaattgt taagatatca gttcttcaaa
142441 atttgatcta tagattcaat atagtcccta tcgaaatacg cgaaacttat cttgtagatg
142501 tcaccaaact gattccacag tttatatgga gaggcaagag acgcagaata gtcaacacga
142561 tagtggagat gcacgttggg tgactgacac tactcaactt taagacttac tattaagcta
142621 cagtcatcaa gatagtgtga tactggcgaa ataatagaca cgtaagtgca tgcatcagaa
142681 tggaacgccc agaagtagaa cccacatagt acaactgata tttgatcaga tgagtgagaa
```

```
142741 gcgctttcat tgtcagaagg ggggcgttgg tttcaccaaa tgggtgctga agacaacgtg
142801 gcgatctagc atggcaaaga gtagagacta gacgcagaac ctatgactta gcgcagcatt
142861 gggctcagag atgggtctca ggactggaat tgtcaaacct agtcgatagg gcaggtcata
142921 gaggcatcat aacatgaaat accaaaactt taaggaagct agaggaaggg tggatcacct
142981 atcttgcatg ccagcaggtc gactctagag gatcccttcc agatgctttg aaggatctag
143041 aatttccagc agcttggctc tggttgacat ttaaaaatta acatacttaa tcctctaatc
143101 atatatgatc accgccaaca aaagtgatag agggtctccc ttagataaaa aattggaatt
143161 aatatgtact ttaaaagtag atctagtttt aaaaactaga tggtgttaca agtacagtaa
143221 tgaaagccat tttctttcat ttttatttga aaaacaatct tatacatcag aaagcttagt
143281 aaattaattc attgtctttg ttttggaatt tcctaaactg agtagataga cggtgagcat
143341 cacgatagcc aaagactgta actgaaggcc aagaatactc tgaggttgga ttttagggca
143401 ctaggaaggg ccgctaataa cgacactctt taaaaactct cactttctcc ctgtaataat
143461 tataagaata atatgtctga catttttaaa aaaagacttt agaatgggag ttttcataat
143521 ttaaatcaga tcagaaaaac aataaaacga acttaggcca tggaagtcta ggagccaatt
143581 ctaacaagaa caaacttata aaacaacgcc ttcagaatag aagcctaagt tgatagattt
143641 aattttcaac aaaaaaagaa catctacatt cttctgcact aaactgtgaa actcatcata
143701 gcagggatga aagccacatg agacatggca ggtactgaac aaatatttgt tggataattt
143761 aaataaaaca atctttctgt tccaaggaga tcactttgga aggctataca attgttctac
143821 tcatggctca aaatactttt ggggaggttt ttgtttggaa attgccacta gagccagagc
143881 tctttccctg ggttgaaata aggatgtgtg agtttcatca gcancatgcc tgcaggtcga
143941 ctctagagga tccccgtgct ggaagactgg atatctatat gcagaagaat aaaactagac
144001 ccctatctct caccatatac aaaagtcaaa tcaaaatgga ttaaagattt agatgtaaga
144061 catgaaacta ccagaaaaca ttggggaaat gcttcgggag attgacctag gctaagattt
144121 cttttttctt tttctttttt tttggttgta ggggggtggc ggggttgcgg gggcagggca
144181 gagaaaatat ctccaccttt ctctggtaag agaaagatgt caccaggtgg cttccaggtt
144241 catgggtggt agaataaagc aacagtattg ttctcgacaa ccccagtcaa catatcaaac
144301 gtatcattgc ttttcgtggg ctctaattgg gtcacatccc tgaatccatc tccatggcca
144361 ggataatgct agtgctgagt ggcttagttc taagccacat gttctgcccc tgaccaggga
144421 tatagccaat tccactgaat cagcctgtgg gctagagagg agaggaagta gtccctagag
144481 aataatcagg tttaccttat caacagggag aggggaagtt gagtgcaaaa actacatact
144541 taaccaccct tcaatcagtt caactggata ttttgtggac caagatattg ttaccggggg
144601 gtccttgttc ttagagctcc gaagatggtg gcggggggc ttcaagatgg tagccagcct
144661 cgtgttatct gaactggggt tcttgggctc acgtattcca agaaatggaa tcttgggcca
144721 tgcagtgagt gttatagctc tatttagaag cgtgggtcac ggaagaaaac ctagaaacca
144781 gtgactagcc ttcactcgat taggatgaac caggcagtta gcgtgcaaga acaattggca
144841 agctttagcc gaatggg
//
```

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1653lxm

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1   Web Page URLs for STN Seminar Schedule - N. America
NEWS 2   "Ask CAS" for self-help around the clock
NEWS 3 Jun 03 New e-mail delivery for search results now available
NEWS 4 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 5 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
               now available on STN
NEWS 6 Aug 26 Sequence searching in REGISTRY enhanced
NEWS 7 Sep 03 JAPIO has been reloaded and enhanced
NEWS 8 Sep 16 Experimental properties added to the REGISTRY file
NEWS 9 Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 10 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 11 Oct 24 BEILSTEIN adds new search fields
NEWS 12 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 13 Nov 18 DKILIT has been renamed APOLLIT
NEWS 14 Nov 25 More calculated properties added to REGISTRY
NEWS 15 Dec 04 CSA files on STN
NEWS 16 Dec 17 PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 17 Dec 17 TOXCENTER enhanced with additional content
NEWS 18 Dec 17 Adis Clinical Trials Insight now available on STN
NEWS 19 Jan 29 Simultaneous left and right truncation added to COMPENDEX,
               ENERGY, INSPEC
NEWS 20 Feb 13 CANCERLIT is no longer being updated
NEWS 21 Feb 24 METADEX enhancements
NEWS 22 Feb 24 PCTGEN now available on STN
NEWS 23 Feb 24 TEMA now available on STN
NEWS 24 Feb 26 NTIS now allows simultaneous left and right truncation
NEWS 25 Feb 26 PCTFULL now contains images
NEWS 26 Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 27 Mar 20 EVENTLINE will be removed from STN
NEWS 28 Mar 24 PATDPAFULL now available on STN
NEWS 29 Mar 24 Additional information for trade-named substances without
               structures available in REGISTRY
NEWS 30 Apr 11 Display formats in DGENE enhanced
NEWS 31 Apr 14 MEDLINE Reload
NEWS 32 Apr 17 Polymer searching in REGISTRY enhanced
NEWS 33 Jun 13 Indexing from 1947 to 1956 added to records in CA/CAPLUS
NEWS 34 Apr 21 New current-awareness alert (SDI) frequency in
               WPIDS/WPINDEX/WPIX
NEWS 35 Apr 28 RDISCLOSURE now available on STN
NEWS 36 May 05 Pharmacokinetic information and systematic chemical names
               added to PHAR
NEWS 37 May 15 MEDLINE file segment of TOXCENTER reloaded
NEWS 38 May 15 Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS 39 May 16 CHEMREACT will be removed from STN
NEWS 40 May 19 Simultaneous left and right truncation added to WSCA
NEWS 41 May 19 RAPRA enhanced with new search field, simultaneous left and

right truncation
NEWS 42 Jun 06 Simultaneous left and right truncation added to CBNB
NEWS 43 Jun 06 PASCAL enhanced with additional data
NEWS 44 Jun 20 2003 edition of the FSTA Thesaurus is now available
NEWS 45 Jun 25 HSDB has been reloaded

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
          MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
          AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS   STN Operating Hours Plus Help Desk Availability
NEWS INTER   General Internet Information
NEWS LOGIN   Welcome Banner and News Items
NEWS PHONE   Direct Dial and Telecommunication Network Access to STN
NEWS WWW   CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

All use of STN is subject to the provisions of the STN Customer
agreement. Please note that this agreement limits use to scientific
research. Use for software development or design or implementation
of commercial gateways or other similar uses is prohibited and may
result in loss of user privileges and other penalties.

* * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 11:36:01 ON 02 JUL 2003

=> file registry
COST IN U.S. DOLLARS   SINCE FILE   TOTAL
                            ENTRY SESSION
FULL ESTIMATED COST   0.21   0.21

FILE 'REGISTRY' ENTERED AT 11:36:11 ON 02 JUL 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 1 JUL 2003 HIGHEST RN 540721-20-8
DICTIONARY FILE UPDATES: 1 JUL 2003 HIGHEST RN 540721-20-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s tgttactcaggggatgaa/sqsp
L1   0 TGTTACTCAGGGGATGAA/SQSP

=> s tgttactcaggggatgaa/sqep
         0 TGTTACTCAGGGGATGAA/SQEP
       92149 SQL=18

.L2   0 TGTTACTCAGGGGATGAA/SQEP
            (TGTTACTCAGGGGATGAA/SQEP AND SQL=18)

=> s ctgggggcagttattgcac/sqep
            0 CTGGGGGCAGTTATTGCAC/SQEP
        69141 SQL=19
L3   0 CTGGGGGCAGTTATTGCAC/SQEP
            (CTGGGGGCAGTTATTGCAC/SQEP AND SQL=19)

=> s ctgggggcagttattgcac/sqsp
L4   0 CTGGGGGCAGTTATTGCAC/SQSP

Connecting via Winsock to Dialog

Logging in to Dialog

Trying 31060000009999...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
****
ENTER PASSWORD:
****
Welcome to DIALOG

Dialog level 02.16.02D

Last logoff: 02jul03 14:32:11
Logon file405 02jul03 18:07:30
* * * * See HELP NEWS 225 for information on new search prefixes
and display codes

***   ***

SYSTEM:HOME
Cost is in DialUnits
Menu System II: D2 version 1.7.9 term=ASCII
            *** DIALOG HOMEBASE(SM) Main Menu ***

Information:
  1. Announcements (new files, reloads, etc.)
  2. Database, Rates, & Command Descriptions
  3. Help in Choosing Databases for Your Topic
  4. Customer Services (telephone assistance, training, seminars, etc.)
  5. Product Descriptions

Connections:
  6. DIALOG(R) Document Delivery
  7. Data Star(R)

  (c) 2000 The Dialog Corporation plc   All rights reserved.

  /H = Help   /L = Logoff   /NOMENU = Command Mode

Enter an option number to view information or to connect to an online
service. Enter a BEGIN command plus a file number to search a database
(e.g., B1 for ERIC).
? b 410

     02jul03 18:07:31 User268147 Session D101.1
         $0.00   0.159 DialUnits FileHomeBase
      $0.00 Estimated cost FileHomeBase
      $0.00 Estimated cost this search
      $0.00 Estimated total session cost   0.159 DialUnits

File 410:Chronolog(R) 1981-2003/Aug
     (c) 2003 The Dialog Corporation

     Set Items Description
     --- ----- -----------
? set hi %%%;set hi %%%

HILIGHT set on as "
HILIGHT set on as "   ·
? b 5, 34, 155, 172
        02jul03 18:07:37 User268147 Session D101.2
            $0.00   0.072 DialUnits File410
        $0.00 Estimated cost File410
        $0.01 TELNET
        $0.01 Estimated cost this search
        $0.01 · Estimated total session cost   0.231 DialUnits

SYSTEM:OS - DIALOG OneSearch
  File   5:Biosis Previews(R) 1969-2003/Jun W5
        (c) 2003 BIOSIS
  File 34:SciSearch(R) Cited Ref Sci 1990-2003/Jun W5
        (c) 2003 Inst for Sci Info
  File 155:MEDLINE(R) 1966-2003/Jun W5
        (c) format only 2003 The Dialog Corp.
*File 155: Medline has been reloaded and accession numbers have
changed. Please see HELP NEWS 155.
  File 172:EMBASE Alert 2003/Jun W5
        (c) 2003 Elsevier Science B.V.

    Set Items Description
    --- ----- -----------
? s "protein cluster" or "protein clusters"
            0 PROTEIN CLUSTER
      .   12 PROTEIN CLUSTERS
    S1   12 "PROTEIN CLUSTER" OR "PROTEIN CLUSTERS"
? s "protein cluster 2" or "protein cluster II"
            0 PROTEIN CLUSTER 2
            0 PROTEIN CLUSTER II
    S2   0 "PROTEIN CLUSTER 2" OR "PROTEIN CLUSTER II"
? s c1galt1
    S3   0 C1GALT1   · :
? s hmm-pfam or pfam?
            0 HMM-PFAM
          340 PFAM?
    S4   340 HMM-PFAM OR PFAM?
? s cg9520
    S5   0 CG9520
? s "c elegans" or "caenorhabditis elegans"
            9 C ELEGANS
         5327 CAENORHABDITIS ELEGANS
   S6   5336 "C ELEGANS" OR "CAENORHABDITIS ELEGANS"
? s "d melanogaster" or "drosophila melanogaster"
            0 D MELANOGASTER
        19775 DROSOPHILA MELANOGASTER
    S7 19775 "D MELANOGASTER" OR "DROSOPHILA MELANOGASTER"
? ds

Set   Items Description
S1   12   "PROTEIN CLUSTER" OR "PROTEIN CLUSTERS"
S2   0   "PROTEIN CLUSTER 2" OR "PROTEIN CLUSTER II"
S3   0   C1GALT1
S4   340 HMM-PFAM OR PFAM?
S5   0   CG9520
S6   5336 "C ELEGANS" OR "CAENORHABDITIS ELEGANS"
S7   19775 "D MELANOGASTER" OR "DROSOPHILA MELANOGASTER"
? s s6 and s7
         5336 S6
        19775 S7
    S8   408 S6 AND S7

? s s4 and s5
          340 S4
            0 S5
     S9   0 S4 AND S5
? s s4 and s6
          340 S4
         5336 S6
     S10   7 S4 AND S6
? s cluster? and s8
       393300 CLUSTER?
          408 S8
     S11   23 CLUSTER? AND S8
? ds

Set   Items Description
S1   12 "PROTEIN CLUSTER" OR "PROTEIN CLUSTERS"
S2   0 "PROTEIN CLUSTER 2" OR "PROTEIN CLUSTER II"
S3   0 C1GALT1
S4   340 HMM-PFAM OR PFAM?
S5   0 CG9520
S6   5336 "C ELEGANS" OR "CAENORHABDITIS ELEGANS"
S7   19775 "D MELANOGASTER" OR "DROSOPHILA MELANOGASTER"
S8   408 S6 AND S7
S9   0 S4 AND S5
S10   7 S4 AND S6
S11   23 CLUSTER? AND S8
? s s1 and s6
          12 S1
        5336 S6
     S12   0 S1 AND S6
? s s1 and s7
          12 S1
       19775 S7
     S13   0 S1 AND S7
? s diabetes or nidd or obese or obesity
       430718 DIABETES
          441 NIDD
        78580 OBESE
       146082 OBESITY
     S14 570341 DIABETES OR NIDD OR OBESE OR OBESITY
? s s4 and s14
          340 S4
       570341 S14
     S15   0 S4 AND S14
? s s14 and s6
       570341 S14
         5336 S6
     S16   14 S14 AND S6
? s s14 and s7
       570341 S14
        19775 S7
     S17   12 S14 AND S7
? ds

Set   Items Description
S1   12 "PROTEIN CLUSTER" OR "PROTEIN CLUSTERS"
S2   0 "PROTEIN CLUSTER 2" OR "PROTEIN CLUSTER II"
S3   0 C1GALT1
S4   340 HMM-PFAM OR PFAM?
S5   0 CG9520
S6   5336 "C ELEGANS" OR "CAENORHABDITIS ELEGANS"
S7   19775 "D MELANOGASTER" OR "DROSOPHILA MELANOGASTER"

```
S8      408  S6 AND S7
S9        0  S4 AND S5
S10       7  S4 AND S6
S11      23  CLUSTER? AND S8
S12       0  S1 AND S6
S13       0  S1 AND S7
S14  570341  DIABETES OR NIDD OR OBESE OR OBESITY
S15       0  S4 AND S14
S16      14  S14 AND S6
S17      12  S14 AND S7
```

WEST Search History

DATE: Wednesday, July 02, 2003

Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT; PLUR=YES; OP=OR		
L8	L5 same vector same "host cell"	20	L8
L7	L5 same vector and "host cell"	108	L7
L6	L5 and vector and "host cell"	1564	L6
L5	(obesity or "metabolic disease" or diabetes) same (protein or peptide or polypeptide)	4658	L5
L4	(obesity or "metabolic disease" or diabetes) and (protein or peptide or polypeptide)	14815	L4
L3	L2 and "host cell"	29	L3
L2	L1 and (vector)	34	L2
L1	"protein cluster"	54	L1

END OF SEARCH HISTORY